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Kobacker, F. L.
1924.

An adequate and thoughtful
survey.

A good chapter on milk.

Good "resume' & comment."

S A N I T A R Y S U R V E Y
 O F
M O N R O E , M I C H.

By

J. Lester Kobacker.
111

During the Summer of 1923.

WA

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INTRODUCTION

The city of Monroe ,Michigan is situated in the southeastern corner of the state ,about 15 miles north of the Ohio boundry and 2 miles from the shore of Lake Erie, on the river Raisin. It is 40 miles southwest of Detroit and about 20 miles northeast of Toledo. The little city is the county seat of Monroe county and numbers its inhabitants at approximately 14,000 . These include many retired farmers and old settlers. The foreign population is very small , even the transient unskilled labor in the mills being composed chiefly of southerners rather than of foreigners.

The land now occupied by the city belonged originally to the Erie tribe of Indians. The land in succession fell to the Pottawattomies, Hurons and finally once again to the Pottawattomies.

The first white settler was one Col Francis Neyarre who purchased a tract of land from the Pottawattomies along the river Raisin in 1785. Within a short time there were a hundred families in the neighborhood, chiefly French from Detroit. The river, which now flows thru the city was called Riviere au Raisin by the French in token of the chief product grown on its banks at the time. This was corrupted later to river Raisin which if not an exact translation is at least, as euphonious as the original French .

About 1790 a treaty was concluded between the Indians and the United States ceding land from the river Raisin to Lake St.Clair and three years later the first settlement sprang up.

Despite the treaty the Indians began to grow dissatisfied and under the leadership of Tecumseh and Ell-shwa-twa, the restlessness crystallized in an effort to expel the settlers in 1807.

The village was at this time, known as French town and numbered 1340 settlers. The war of 1812 found in French-town one of its chief stages for thrilling encounters, massacres, etc.

The war at an end, the number of inhabitants was found to be sufficient to warrant consideration of a city and shortly thereafter a court house was erected and the name was changed to Monroe in honor of President Monroe.

The first village election occurred in 1827. In 1837 a charter was granted the city by the state and it was regranted in 1871 and 1896.

From earliest days Monroe has been a grain center and it still occupies this position. It also is quite a central point for lake fisheries. However its greatest industry by far, is its great paper plants which turn out paper products of all sorts in such quantity as to give the city right to a place among the few great homes of the paper industry. The first mill to engage in this industry began in 1834 and there has been a constant growth and addition until at the present time one company out of half a dozen, alone, has five huge plants in operation.

As has been suggested, the city of Monroe lies on a flat shore line removed a scant 2 miles from the water front. The distance between the city and the lake is largely marsh lands sloping ever so gently down into the water.

The entire drainage is in general southeast with seldom more slope than a drop of 4 feet to the mile.

The city lies in the bed of an old river which even now meanders quietly thru it and once in awhile, engorged by ice and enraged by the spring freshets ,rises wildly,takes possession once again of its gift to man- its broad flood plains- and the lower parts of the city become inundated. In consequence of this fact, a rich silt is spread over the valley and all about the city fertile land produces unsurpassed crops.

In addition to its other natural blessings, Monroe has a climate typical of the great lakes district. Situated on the shore of Lake Erie, the cool breezes in the summer and mild winds in the winter temper the extremes of temperature. The rainfall is fairly abundant and the crops of wheat,corn and grapes flourish abundantly in the surrounding neighborhood.

The city lies on both sides of the river which is itself too shallow for navigation. It has advantages of location as far as natural beauty and conditions making for good sanitary conditions go. We shall see in the ensuing chapters what use has been made of its natural advantages by the population of the city and how much yet remains to be accomplished.

THE HEALTH DEPARTMENT

This organization is conspicuous because of its absence. For all practical purposes it is non existant. Officially, it is constituted of four or five members of the city commission ,meeting under the leadership of the city Health officer who is elected at the polls. In the memory of the present officials(and that dates back a number of years) no meeting has every been held. The present Health officer,one of the city's busiest physicians, accepted the title and occupied the official position ,in name only. This was necessitated due to the fact that the city physician could not occupy two positions simultaneously- yet he performs what ever duties might devolge on the health officer. The real encumbent,signs any papers brought him-other than that he is non-active.

Thus it may been seen that the board of health really consists of one man and that his work is really performed by another. This work consists of little other than inspecting wells and seeing that certain ordinances,as regards animals and so on, are enforced .

The department is more than inadequate. It is practically nonfunctional. It gets its funds,when needed, thru the city commission which in Monroe, wields a most autocratic sovereignty in all municipal matters.

Fortunately, the state is very cooperative and lends assistance in many ways. Bacteriological reports are all handled thru the state. The state compiles the various statistics and state authorities carry on inspections of most sanitary conditions.

The amazing thing about the city is that despite all of its inadequate health department and lack of supervision or even interest in the various hygeinic problems that normally confront the Board of Health, the city thrives. It enjoys a low, general, morbidity rate. The outbreaks of even the common deseases are infrequent and seldom severe. Surrounded by marsh land, malaria is unknown; with a poor water and a poor sewage system, typhoid is not frequently seen and so it goes. Certainly one can ascribe the general good health only to the strange pranks of a propitious fate. It is certainly not due to the good management of the city Hygeine.

THE WATER SUPPLY

At the time of making this survey, one could scarcely complain of too great intricacy in Monroe's method of obtaining water. The water is taken from Lake Erie and after chlorination is pumped directly to the city. There is no ceremony of filtration or preliminary settling. As in all health matters, it seems that in the past the motto "Too many precautions result in no good", has been the guiding spirit in the city.

The water is taken from 4000 feet out in the lake. It flows by gravity to the pumping station, a distance of 6100 feet from the end of the intake pipe. The distance which the pipe extends into the water would seem at first glance rather short and it is perhaps wise to explain the reason for choosing this particular distance.

The pipe at this point lies on a fairly firm shale and it has been found that as one proceeds further into the lake the bottom becomes mucky and soft. More over, the shores slope is so gradual that the gain in depth by extending out three or four miles would be negligible. Consequently here, the authorities are making the most of the conditions at hand.

The water taken in is, of course, not always crystal clear but this is not given any consideration. The spring season brings with it the greatest amount of trouble and the water is, at this time, scarcely tempting, even for bathing to those who possess any sense of the aesthetic. (see turbidity curve, fig I). During the remainder of the year, there is only a bit of light clay now and then.

When the water arrives at the pumping station it is treated with liquid chlorine. The amount used varies from four to eight pounds per million gallons. The quantity used is determined by the laboratory reports on the condition of the water.

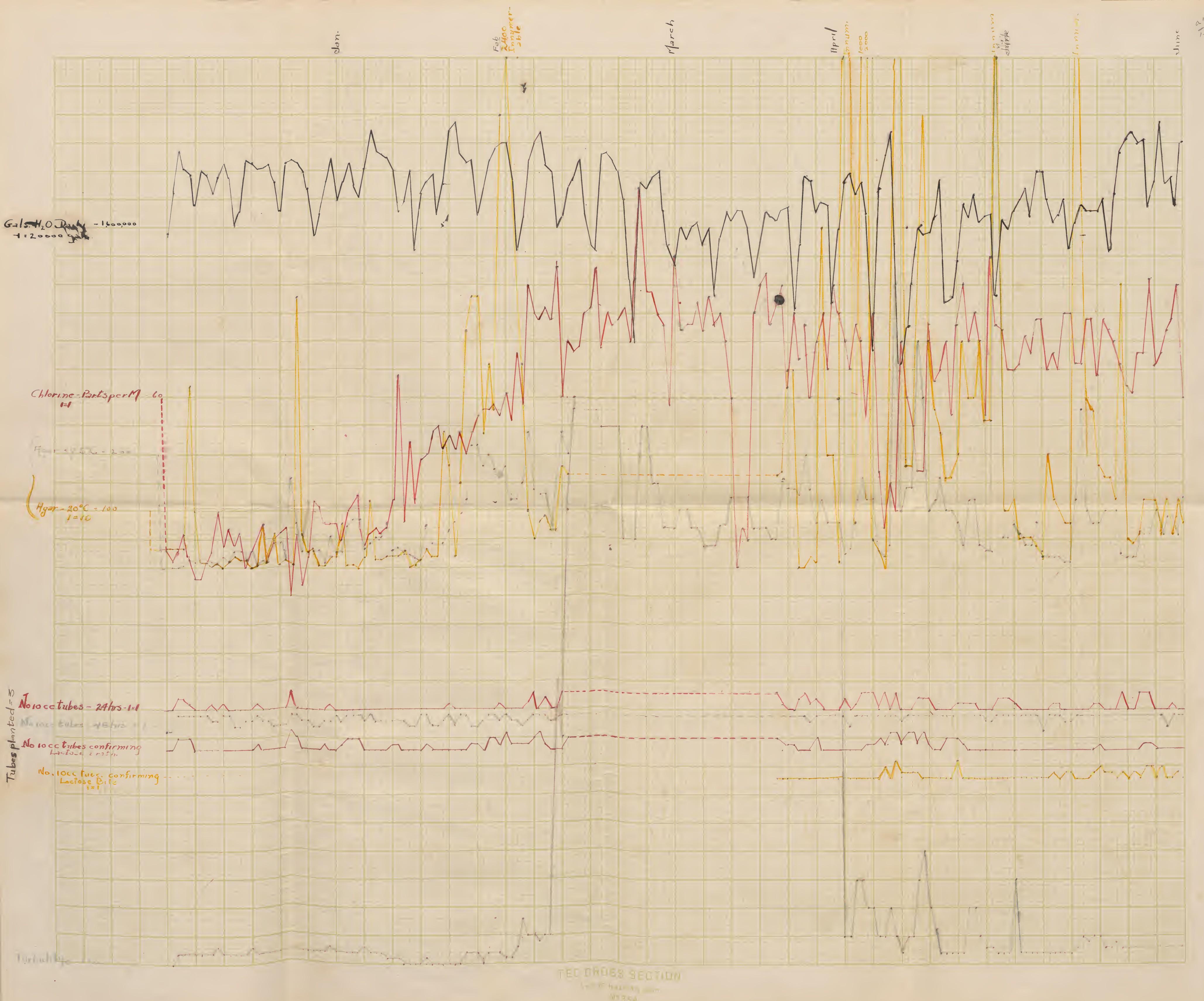
Each day three bacterial analyses are run on the water, each analysis being conducted on three samples. If any one report is bad, the water is considered unsatisfactory. The usual form used and the typical report is here-with presented.

Water pumped	Lbs per Day	Available Chlorine	Bacteriological Test	Oxygen consumed & residual	Bacterial Analysis					
					Total Count 1 c.c. treated	Fermentation tubes Lactose Broth - 10cc.	No. showing gas 10cc. tubes confirming			
May 1, '22, 639,193.92	0.74	.78	100	2.5	125	130	3	1	3	0
Oct 1, '22, 638,483.28	6.12	.56	10	2.2	28	14	3	0	2	0

If the water is found to be withstandng the chlorination then being utilized, the dose is augmented.

A more comprehensive understanding of the amount of water, its treatment, and condition over an extended period is obtainable from the accompanying graph (Fig. 1, next page), than from any amount of written material. This graph is taken from daily reports over the period of January to June inclusive, 1923.

Fig. 1



A word may here be said as regards the general external influences operating, which might prove detrimental to Monroe's securing an uncontaminated supply. This is essential since the source of supply will remain unchanged after the installation of the new plant(described below).

The city, as has been pointed out, lies midway between the two large cities, Detroit and Toledo. The former empties its sewage into the Detroit River, which in turn empties about 20 miles north of Monroe. Toledo runs its waste into the Maumee river which flows out into the lake about twenty miles south of Monroe. One might suppose therefore that the water intake of the little city would be doubly contaminated. Reference to the map, (fig.2) will aid in comprehending the explanation hereinafter attempted.

The arrow A represents the Detroit river flow - the arrow B, the Maumee flow. These two meeting, follow the mean course, arrow C . B takes unto itself the River Raisin current, D. The refuse from all large sources is thus carried away from the intake which lies about two miles north of the mouth of the river Raisin (X in fig.2) . Moreover the 20 mile settling bed of the two large rivers is quite adequate to dispose of the greater part of the contaminated detritus. The little point just north of the mouth of the Raisin is an admirable means of shunting its waters away from the intake.

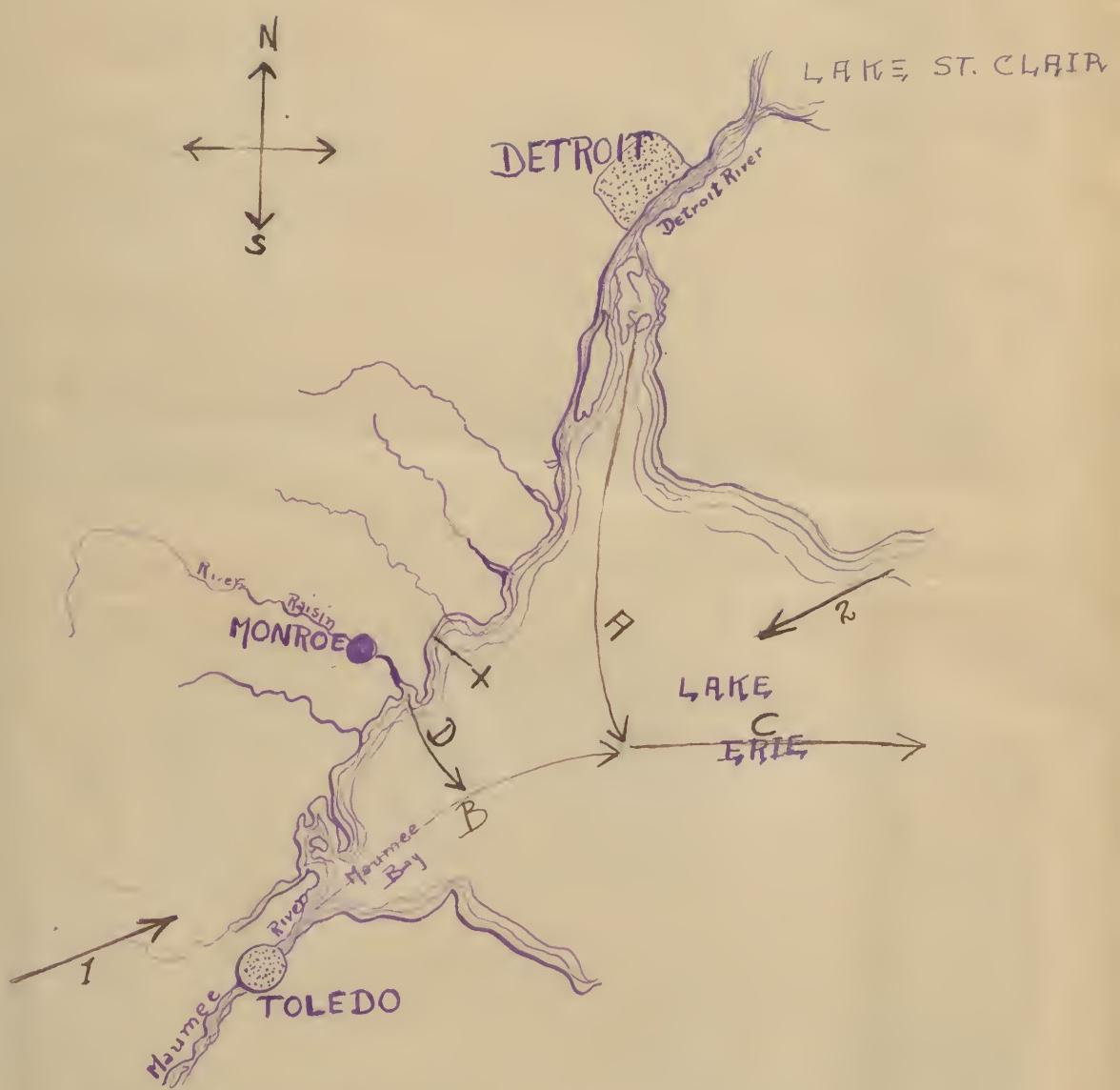


Figure 2-

The winds are equally favorable. The chief winds are south-westers and northeasters while some come directly from the west. None of these would cause a directing of contaminated water into the intake, while south winds capable of causing such damage do not blow except on rare occasions. The arrows 1 and 2, in fig.2. illustrate graphically the direction of the prevailing winds and their relations to the water supply.

At present a modern filtration plant is in the course of construction. It is being built according to the most recent advances in hydraulic engineering .Outside the plant, settling basins are being constructed (fig.3).



Fig.3

- '5 settling basins in course of construction' -

From these the water will be lead to the filtration beds where a rapid sand filtration method is being installed. These are to have a capacity of four million gallons daily, more than enough to supply the city needs for some time to come. The water will be treated with liquid chlorine just as at present, to insure its reaching the people with no disease contamination. It is needless to remark that such a system has been a crying need of the city and that it will constitute an important advance in hygeinic conditions.

It is perhaps worthy of note that the officials in charge of the water system are well trained and are quite capable of caring for the city's health, once the proper system and equipment has been given them .

• • • • •

SEWAGE

Let it never be said of this thriving town that it does not avail itself of the natural advantages placed at its disposal. The river Raisin constitutes one of these environmental advantages. It runs straight thru the center of the city thruout its length and what could be simpler or easier on the city treasury, than to direct the sewage into the river in its original state, undivided and untreated? This is exactly what Monroe's system does.

House sewage and industrial waste alike are emptied into the river by a number of outlets-placed not below the city but all along the banks directly in the city. The theory is, that since the water supply is obtained elsewhere, the river is the logical and excellent disposal bed.

Yet it would be supposed that the people would be somewhat alarmed at having a sewage outlet within three or four miles of the water intake even though the general currents would appear to safe-guard the water supply. Then too, aesthetic considerations enter. There also must appeal to those in whose hands the city destiny rests, that there are easier tasks than that of restraining American Youth from swimming in a river which is attractively nearby. Since the spirit of Youth is incorrigible , age must make provisions for it and so the mentors of Monroe have a duty as regards their sewage disposal, a duty which they have grossly neglected .

The paper mills have strainers which retain much of the heavy pulp material yet all the remainder finds itself directly in the river.

House sewage is not separated, No chemicals are employed. The sewage enters the river whole.

It seems that certain suggestions might be ventured and they possibly could be acted on to advantage.

1-The industrial shops should be required to extend their refuse pipes to a point below the city.

2-The city should install a system of screening together with adequate chemical disinfection.

These steps would add certain apparent health safe guards, beautify the river and give the Health officials a certain peace of mind-which however appears little disturbed by anything.

• • • • •

GARBAGE & REFUSE

The method by which Monroe disposes of its refuse and garbage is very primitive. The city owns collecting wagons, covered after a fashion, and the citizens pay a certain service fee for the collection. The garbage is taken by the wagon load to the public dump and there emptied. An octogenerian, who is scarcely able to drag himself along, is entrusted with the duty of "burying" the matter. This consists in throwing a few shovels full of earth over each load and perhaps making a bon-fire of certain portions, of the material. The old dump is located almost next to the site of the new water works and since work started on this structure, orders have been issued forbidding dumping of garbage or any putrefying material on the grounds—an order which has been entirely neglected as the picture below illustrates:



Fig.4-

This dump, is by the way, only across the street from a well populated neighborhood.

The new dump is located a few blocks further out but still within the city. It is, as yet, not used a great deal.

The officials realize the effects such eye-sores have on the actual health of the populace, yet they are handicapped by lack of funds. The most they can accomplish is to look for a more suitable dumping grounds.

As matters stand, the two large lots, spoken of above, serve as the flies' happy hunting ground. They breed in immense numbers in the midst of the half buried, decaying and putrefying material. Nor do the odors enhance the general pleasantness of the neighborhood.

The city engineer was quite aroused over the matter but was entirely powerless. He showed with evident disgust a copy of a proposition he had made to the city commission which suggested a piggery- but this had been pigeon-holed. Now, after a year, the suggestion has not even come to discussion. In a last effort to obtain some action he is about to suggest an inexpensive reduction plant, such as were so largely employed during the late war. He is very skeptical as regards the chance of obtaining it, yet it is worth the final effort.

Something must be done. The present method is as dangerous as it is antiquated. It would seem that a small reduction plant, housed in an inexpensive cement building could be installed with a resulting profit to the communities' general health to say nothing of the profit that gradually accrues from the products obtained. But like other sanitary improvements in Monroe, it must, I suppose- await the will and pleasure of the city Commission.

VITAL STATISTICS

(Including an account of infectious diseases)

The method of collecting and recording vital statistics is rather slipshod in Monroe. No attempt has been made by the local authorities to compile the statistics into workable form. In that the state keeps these figures in good shape, the local authorities avoid the additional work by depending on the state officials. Ofcourse the state department finds itself handicapped by incomplete and unsystematic reports.

The writer found that no compilation of births, deaths, or of the various reportable diseases had been made in the city, the blanks having been merely filed away for a long period of years.

The cases of typhoid, scarlet fever, diphtheria, small pox and tuberculosis are reportable and the reports are required rather stringently. In addition measles, chicken pox, mumps, pertussis and influenza are reportable but cases are turned in, in a very desultary manner, except occasionally when an official state shake-up causes a temporary attention to the required reports.

Veneréal diseases are reportable by number. This is conscientiously observed by the authorities.

The death and birth rate, are as follows-as obtained from the State Bureau of Vital Statistics:

	1919	1920	1921	1922	1923
Birth Rate	21.2	26.2	28.7	21.6	22.7
Death Rate	10.4	14.7	10.5	10.9	14.1

There is very patently a substantial margin of births over deaths but it is significant that the death rate has taken a decided rise in the first 6 months of the current year.

The infant mortality figures are indeed enlightening, they are-

For 1000 births	1919	1920	1921	1922	1923 1326 mos.
Infant Mortality	113.8	112.2	51.3	94.5	106.7

One needs to know very little about vital statistics to obtain from such a group of figures a conception that the deaths are occurring at an appalling rate. The average is very nearly one in ten. The exact cause is not clearly apparent, probably it is attributable to no one factor. Rather must we consider that the milk, lack of health control, general disregard of hygienic construction or conduct have all contributed.

The state department of health furnished the writer with certain figures regarding some diseases. The 1919 and 1920 statistics were not available but those for 1921 and 1922 are as follows:

	1921		1922	
	No. of Cases	Rate per 100,000	No. of Cases	Rate per 100,000
Typhoid	2	16.3	0	0
Tuberculosis.	10	81.5	8	62.8
Measles	0	0	0	0
Scarletina	0	0	0	0

These figures serve a double purpose. First of all, they demonstrate that the cases of typhoid and tuberculosis are really very few, considering the conditions under which the town exist (Vid. chapters on milk, sewage, etc.) Secondly: they bring to our attention the alarming negligence of the physicians in making proper returns of reports on disease.

It taxes ones credulity to believe that scarlet fever has not appeared in two years, and one must be extremely naive to accept with faith the statement, that

Monroe has been free of measles for an equal period. The health officer was quite frank in admitting that negligence was known to exist and was tolerated for long periods at a time. Now and then, the State Department of Health steps in with warnings and then for a time the situation improves.

Ofcourse, it must occur to one that while the typhoid and tuberculosis figures are probably far more accurate than those for measles and scarlet fever, yet in the presence of such carelessness as was evidenced in regard to the latter two diseases, it is very probable that the former two are not reported with extreme accuracy.

With the exception of tuberculosis and the venereal infections, all infectious diseases are reportable on a uniform blank.(Fig.5.) . This blank is filed in the state department of Health and from the mass of such material the morbidity statistics may be computed. The City Health Department furnishes postals in blank form(Fig.6) which are to be returned, filled out, in cases of communicable diseases. Evidently these cards are service only in the immediate use, of placarding. They are said to be filed but they are used no further, that is to say, no attempt at compilation of the number of various diseases is made.

Tuberculosis requires a special form in its report(Fig.7) .Physicians are required to report such cases as come to their attention within 24 hours . The report goes to the State Department of Health and so in turn is reported to the National Department . The blanks are in such form as to require thorough inquiry and description of the case on each one.

In Cooperation with U. S. Public Health Service

MICHIGAN DEPARTMENT OF HEALTH
R. M. OLIN, M. D., COMMISSIONER

FINAL REPORT OF COMMUNICABLE DISEASE

Date _____

I herewith report the termination of the case of _____
reported on _____ 19 _____ Name of Patient _____
(Name of Disease)

Township }
Village } of _____
City }
County of _____

Date of Recovery _____ Date of Death _____

Name of Attending Physician _____ Address _____

I hereby certify that all requirements as to terminal disinfection were fully complied with.

Signed _____

Health Officer for _____
(P. O. Address of H. O.)
(Jurisdiction)

Report termination of all communicable disease except Tuberculosis and Venereal Disease on this blank.

IN COOPERATION WITH
MICHIGAN DEPARTMENT OF HEALTH
Use this blank for reporting all Communicable
REPORT OF CASE OF

To be mailed to the Commissioner of the Michigan Department of Health
within his jurisdiction

Fig.5

PRELIMINARY REPORT

Report each case occurring in household.

Monroe, Mich., 191

Sir:—There has come to my knowledge a case of
in the household of who resides at
No. St. Ward.....

The name of the person sick is
age taken sick with this disease on the day of 191

Important: Members of this household attend school.

Yours respectfully,

Dr.

Fig.6

IN COOPERATION WITH U. S. PUBLIC HEALTH SERVICE

(b) MICHIGAN DEPARTMENT OF HEALTH—BUREAU OF COMMUNICABLE DISEASE

Use this blank for reporting all Communicable Diseases Except Tuberculosis and Venereal Disease

REPORT OF CASE OF COMMUNICABLE DISEASE.

To be mailed to the Commissioner of the Michigan Department of Health, Lansing, Michigan, as soon as the Health Officer knows of there being within his jurisdiction a case of communicable disease.

REPORT OF A CASE OF

(Name of disease)

Patient's Name....., Residence..... City.....
of..... County of..... Village.....
Township.....

Occupation of patient..... Sex..... Age.....
If child, name and mail address of parent

Number of persons in household: Adults..... Children.....

Taken sick with this disease on the..... day of..... 192.....
(Date) (Month)

Name of attending physician..... Address.....

Has the infected house been conspicuously placarded?..... Has the person sick with this disease been
ordered isolated?..... (Yes or no) Have all persons exposed to the disease been ordered isolated?.....
(Yes or no)

For how long?.....

Source of Infection?.....

If Smallpox, was patient ever successfully vaccinated?..... When?

Was patient or any member of household engaged in selling milk?.....

192

Signature.....

(Date)

Health Officer of..... (Name of jurisdiction) (Post office Address)

Do you need more report blanks?..... Pamphlets on this disease?.....

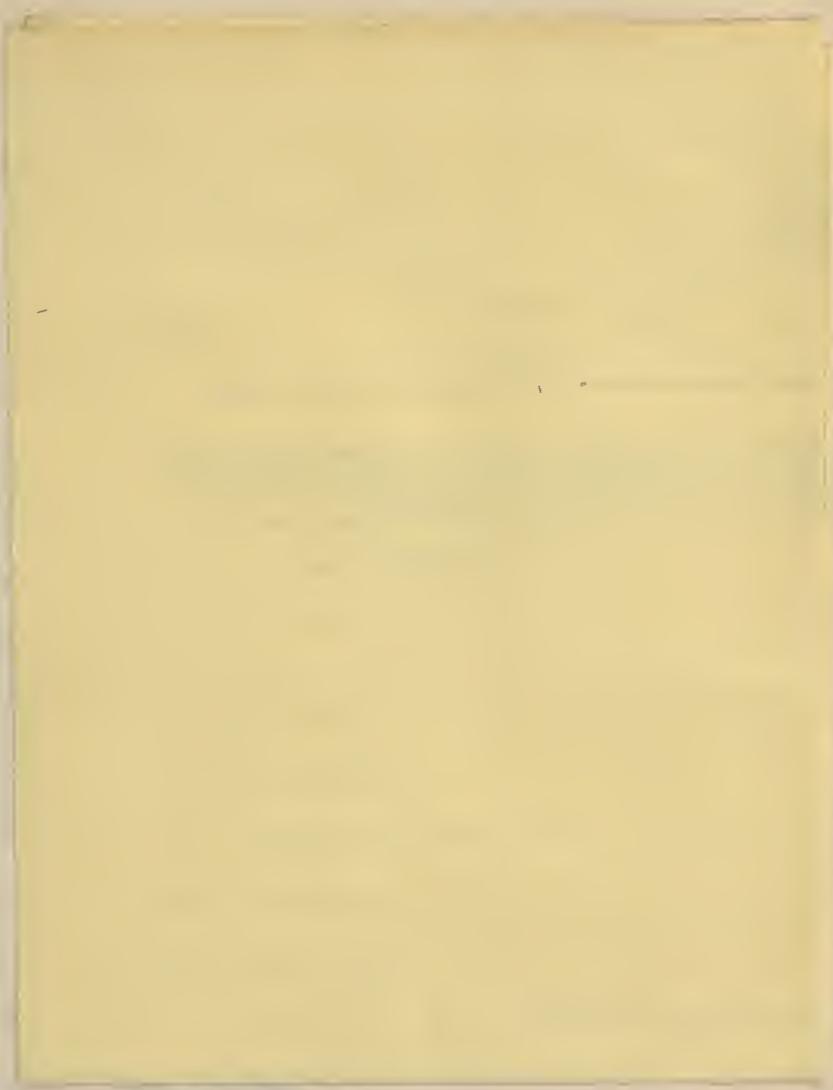


Fig. 7

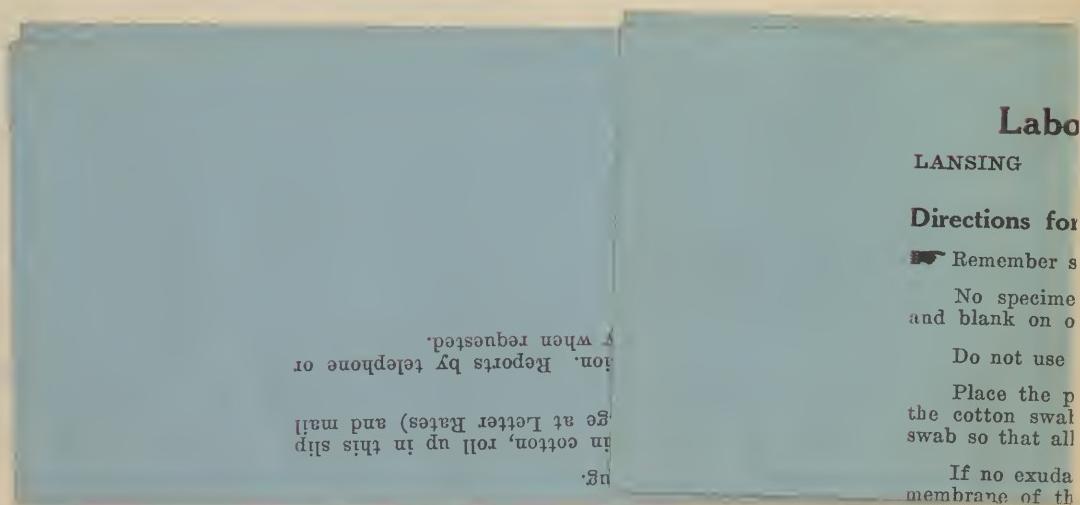


Fig. 8

PHYSICIAN'S NOTICE OF A CASE OF TUBERCULOSIS.

(This report is required by law to be made within twenty-four hours after such fact comes to the knowledge of the physician. These blanks may be obtained of local health officer.)

To the health officer of the of (Name of township, city or village.)

County of State of Michigan.

Name of patient Postoffice address

This patient resides in the of (Name of township, city or village.)

Sex.....	Age.....	Color.....	Nativity.....	Single Married Widowed Divorced
----------	----------	------------	---------------	--

Date of contraction of disease 192
(Month)

Occupation of the patient at the time the disease was contracted

(a) Trade, profession or particular kind of work

(b) General nature of industry, business or establishment in which employed (or employer)

Time (years or months) employed in this occupation

Other occupations engaged in, if any, by the patient after disease was contracted

(a) Trade, profession or particular kind of work

(b) General nature of industry, business or establishment in which employed (or employer)

Time employed in each

Place where last employed

Evidence upon which the diagnosis is made

Was sputum positive*

Part of body affected State of the disease

This notice is given by

..... (Date of making report.)

..... (Street and postoffice address.)

*Sample of sputum should be furnished health officer for examination. (Container for collecting same supplied by health officer.)

NOTE.—As soon as the health officer receives this notice he should record the same in his record book and then forward this notice to the Michigan Department of Health, Lansing, Mich. When any part of the information required above cannot be obtained, this fact should be shown opposite the question, otherwise this report will be returned for correction.

I hereby certify that the above named case was entered in my record book on the (Date)

day of 192
(Month)

Signed

(Name of health officer.)

Laboratory of Michigan Department of Health

1-30-20—100M

LANSING

R. M. OLIN, M. D., COMMISSIONER

HOUGHTON

EXAMINATION FOR DIPHTHERIA

Physician's name M. D., Address.....

Health Officer's name M. D., County..... Address.....

Patient's name Address

Age.....

Membrane..... Location..... Color.....

Duration of Disease..... Temperature

Clinical Diagnosis Has Antitoxin been Administered?

Is this specimen for diagnosis..... or for release.....? Previous results.

Shall report be sent by telephone or telegraph at your expense?

Send report to.....

Date and hour of collection.....

SPACE BELOW RESERVED FOR LABORATORY FINDINGS

B. Diphtheria Streptococci

B. Influenza B. Fusiformis

Micrococcus Catarrhalis Lep. Buccalis

Pneumococci Saccharomyces

Staphylococci

Rec'd..... Ans'd..... Examiner.....

Laboratory of Michigan Department of Health

LANSING

HOUGHTON

Directions for taking Specimen from Throat for Bacteriologic Examination

~~■~~ Remember swabs are sterile when received and avoid contamination.

No specimen will be examined unless taken in accordance with printed directions and blank on opposite side properly filled.

Do not use disinfectant in the throat before taking specimen.

Place the patient in a good light, if a child hold properly, depress tongue and rub the cotton swab gently but freely against margin of any visible exudate. Rotate the swab so that all portions of the cotton come in contact with the throat.

If no exudate can be seen pass the swab far back and rub freely against the mucous membrane of the pharynx and tonsils.

Replace the swab in glass tube and insert the cotton plug.

Fill out blank on other side, wrap the tube carefully in cotton, roll up in this slip and insert both in mailing case, as received (Prepay Postage at Letter Rates) and mail at once to nearest Laboratory.

All reports will be mailed immediately after examination. Reports by telephone or telegraph are at physician's expense and will be given only when requested.

I include in this report a sample blank, used to accompany a swab suspected of being diphtheria (Fig. 8) These examinations are conducted in the state laboratories.

I submit herewith, sample birth (Fig. 9) and death (Fig. 10) certificates, filled out in due form. These forms are used in compiling the birth, death, and infant mortality rates. They also have medico-legal bearing. The age of persons is obtainable legally only from the birth register and a parentage is also there recorded. The cause of death is the necessary part of the death certificate. Hence a physician must be called to render an opinion, thus eradicating very largely the danger of having cleverly contrived murders escape notice. The legal time of demise is also obtainable from these records and there are certain other points of medico-legal importance. These certificates are full and complete, are bound as they come, and so constitute the permanent records of the state.

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In this chapter I have thought it wise to combine reports upon Vital Statistics and Infectious diseases.

In the latter sphere there are still certain threads to be picked up and woven into the complete story. These are chiefly details concerning management of cases of communicable diseases.

THE BIRTH

LAW FOR BIRTHS IN FORCE JAN. 1, 1906.

EXACT STATEMENT OF OCCUPATION IS VERY PROPERLY CLASSIFIED.

State of Michigan enact:

ate shall be immediately registered in the districts districts shall be the same as those provided for hundred seventeen of the public acts of eighteen numbers twenty and two hundred nine of the public duty of the attending physician, or in the absence who shall gratuitously or for hire, deliver a woman file a certificate of birth, properly and completely this act, with the local registrar in the district in er the date of birth. And if there be no physician nce, then it shall be the duty of the father of the of public or private institution, or other competent said certificate of birth with the registrar within on who either gratuitously or for hire shall be in

on who either gratuitously or for hire shall be in
shall neglect or refuse to file a proper certificate of
required by this act, shall be deemed guilty of a
all be fined not less than five dollars nor more than
thirty days, or shall suffer both such fine and
Any registrar who shall neglect or fail to enforce
shall neglect or refuse to perform any of the duties
instructions and directions of the secretary of state,

3. Send in to Secretary of State a copy of your report of deaths on the FOURTH (4th) day of the month just begun.

6. Make quarterly transcript for County of the law to the Secretary of State. All registrars to it or the Secretary of State in case of any execution.

Copies of the law and blank certificates of the Secretary of State.

3. Immediately record the certificate in with "N. 1" for the first birth that occurs ON THE CERTIFICATE, WITH DATE OFFICIAL SIGNATURE. No certificates registrant will be credited.
4. If Christian name is not stated in original to the reporter, and record when returned.

in various pursuits can be known. The question applies to each single word or term on the first line will be sufficient, e. g., *Farmer* or *Planter*, *Physician*, *Compositor*, *Architect*, *Locomotive engineer*, *Civil engineer*, *Stationary Engineer*, etc. But in many cases, especially in industrial employments, it is necessary to know (a) the kind of work and also (b) the nature of the business or industry, and therefore an additional line is provided for the latter statement; it should be used only when needed. As examples: (a) *Spinner*, (b) *Cotton mill*; (a) *Saleman*, (b) *Grocery*; (a) *Foreman*, (b) *Automobile factory*. The material worked on may form part of the second statement. Never return "Laborer," "Foremen," "Manager," "Dealer," etc., without more precise specifications, as *Dzy laborer*, *Farm laborer*, *Laborer—Coal min*, etc. Women at home, who are engaged in the duties of the household only (not paid *Housekeepers*) who receive a definite salary, may

Fig. 10.

MARGIN RESERVED FOR BINDING.

WRITE PLAINLY, WITH UNFADED INK—THIS IS A PERMANENT RECORD.

N. B.—In case of more than one child at a birth, a SEPARATE RETURN must be made for each, and the number of each in order of birth, stated. See instructions on back.

PLACE OF BIRTH
 County of Monroe
 Township of _____
 or _____
 Village of Michigan
 or _____
 City of Monroe
 FULL NAME
 OF CHILD James G. Doe

Was father of this child in service in war
 against Germany yes? If so, from what
Michigan and Monroe?
 (State) (County)

MICHIGAN DIVISION OF VITAL STATISTICS

Certificate of Birth

Register No. 46134St., 4 Ward)(No. 364 Elm St)(If birth occurs in a hospital or other institution, give name of same
 instead of street and number.){ If child is not yet named, make
 supplemental report, as directed.

Sex of child <u>Male</u>	Twin, triplet, or other? <u>-</u>	and	Number in order of birth	Legitimate? <u>yes</u>	Date of Birth <u>July 20, 1923</u>
FATHER <u>Charles Doe</u>			MOTHER <u>Helen Smith</u>		
Residence (P. O. Address) <u>364 Elm St</u>			Residence (P. O. Address) <u>364 Elm St</u>		
Color or Race <u>White</u>	Age at Last Birthday <u>26</u> (Years)		Color or Race <u>White</u>	Age at Last Birthday <u>21</u> (Years)	
Birthplace <u>Detroit, Mich.</u>			Birthplace <u>Lansing, Mich.</u>		
Occupation (And Industry) <u>Fabric Worker</u>			Occupation (And Industry) <u>Housewife</u>		

Number of child of this mother 1Number of children, of this mother, now living 1

CERTIFICATE OF ATTENDING PHYSICIAN OR MIDWIFE.*

I hereby certify that I attended the birth of this child, who was born alive at 10:40 P.M.
 on the date above stated.
 (Born alive or stillborn.)Have eyes of child been treated with
 a prophylaxis solution? yes(Signature) Dr. Lester J. BlackmerGiven or christian name added from a
 supplemental report James G. Doe 19Dated 7-21-1923

(Attending physician, midwife, father, etc.)

Address 364 Elm StFiled 7-22-1923

Registrar.

The People of the State of Michigan enact:

Section 1. All births that occur in the state shall be immediately registered in the districts where they occur, which primary registration districts shall be the same as those provided for the registration of deaths by act number two hundred seventeen of the public acts of eighteen hundred ninety-seven, as amended by acts numbers twenty and two hundred nine of the public acts of nineteen hundred one. It shall be the duty of the attending physician, or in the absence of an attending physician, of any other person who shall gratuitously or for hire, deliver a woman of child, or attend a woman in childbirth, to file a certificate of birth, properly and completely filled out with all the particulars required by this act, with the local registrar in the district in which the birth occurred, within five days after the date of birth. And if there be no physician or other person, as above defined, in attendance, then it shall be the duty of the father of the child, householder, manager or superintendent of public or private institution, or other competent person having cognizance of the facts, to file said certificate of birth with the registrar within five days after birth.

Am. 1915, Act 295.

Section II. Any physician or other person who either gratuitously or for hire shall be in attendance upon a case of confinement who shall neglect or refuse to file a proper certificate of birth with the local registrar within the time required by this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined not less than five dollars nor more than fifty dollars, or shall be imprisoned not to exceed thirty days, or shall suffer both such fine and imprisonment at the discretion of the court. Any registrar who shall neglect or fail to enforce the provisions of this act in his district, or shall neglect or refuse to perform any of the duties imposed upon him by this act or by the instructions and directions of the secretary of state, shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be fined not less than ten dollars nor more than one hundred dollars or be imprisoned not over thirty days, or shall suffer both such fine and imprisonment at the discretion of the court.

Am. 1915, Act 295.

DUTY OF PHYSICIANS AND MIDWIVES ATTENDING BIRTHS.

The attending physician or midwife is required, under penalty provided in the law as quoted in the extract above, to file a properly made out certificate of birth with the township, village or city clerk (or, in certain cities, with the health officer) WITHIN FIVE DAYS AFTER BIRTH. The local registrar is obliged, under penalty, to report violations of this requirement. No certificate made out in pencil will be accepted. PLEASE WRITE PLAINLY AND TAKE PAINS TO MAKE A CORRECT STATEMENT OF THE FACTS REQUIRED BY LAW, AS THE RECORD MAY BECOME OF GREAT LEGAL AND PERSONAL IMPORTANCE.

DUTY OF REGISTRARS OF BIRTHS.

1. Appoint a deputy to act only in illness, absence or other disqualifications of the registrar.
2. Examine each certificate of birth when filed by the physician, midwife or other person and see that all of the items required by law are properly filled out. If absolutely impossible to ascertain any fact, the space should be filled by the word "Unknown." DO NOT ACCEPT A CERTIFICATE MADE OUT IN PENCIL UNDER ANY CIRCUMSTANCES. No credit will be given for it. A stillbirth should be registered both as a birth and as a death.
3. Immediately record the certificate in the local registrar, numbering it in order beginning with "No. 1" for the first birth that occurs in each year. ENTER THE SAME NUMBER ON THE CERTIFICATE, WITH DATE OF FILING IN YOUR OFFICE AND YOUR OFFICIAL SIGNATURE. No certificates not properly numbered, dated and signed by the registrar will be credited.
4. If Christian name is not stated in original return, issue a "Supplemental Report" blank to the reporter, and record when returned.
5. Send in to Secretary of State all certificates of births in your possession when making your report of deaths on the FOURTH (4th) day of the month, except only those belonging to the month just begun.
6. Make quarterly transcript for County Clerk and at once report any violation or infraction of the law to the Secretary of State. All registrars should carefully read the entire law and refer to it or the Secretary of State in case of any difficulty or doubt in regard to the details of its execution.

Copies of the law and blank certificates of birth will be supplied by the Local Registrar or by the Secretary of State.

1 PLACE OF DEATH

County.....*Monroe*

MICHIGAN DEPARTMENT OF HEALTH

Division of Vital Statistics

CERTIFICATE OF DEATH

Register No.....

Township.....

Village.....

City.....*Monroe*(No. 316 E. Main St., Ward 6..... Ward)
(If death occurred in a hospital or institution, give its NAME instead of street and number)2 FULL NAME.....*John Doe*

a) Residence No. 316 (Usual place of abode)

Length of residence in city or town where death occurred 12 yrs. 6 mos. 4 ds.

St., Ward. (If non-resident give city or town and state)
How long in U. S., if of foreign birth? yrs. mos. ds.

PERSONAL AND STATISTICAL PARTICULARS

3 SEX Male

4 Color or Race White

5 Single, Married, Widowed or Divorced (Write the word) Married

5a If married, widowed or divorced

HUSBAND of (or) WIFE of

6 DATE OF BIRTH

(Month, day and year) Dec. 20, 1879

7 AGE

Years 43

Months 7

Days

If LESS than

1 day hrs.

OR ... min.

8 OCCUPATION OF DECEASED

(a) Trade, profession or particular kind of work Laborer

(b) General nature of industry, business, or establishment in which employed (or employer) Paper Mill

(c) Name of employer Consolidated Paper Co.

9 BIRTHPLACE (city or town)

(state or country) Passaic, New Jersey

10 NAME OF FATHER

James Roe

PARENTS

11 BIRTHPLACE

OF FATHER (city or town) Pictetburg, N.Y.

(state or country)

12 MAIDEN NAME

OF MOTHER

Natalie Wright

13 BIRTHPLACE

OF MOTHER (city or town) Pictetburg, N.Y.

(state or country)

14 Informant

Helen Roe

(Address) 316 E. Main St.

15 Filed....., 192.....

MEDICAL CERTIFICATE OF DEATH

16 DATE OF DEATH

(Month, day and year) July 20 1923

17 I HEREBY CERTIFY, That I attended deceased from

London, Eng., 1923, to July 20, 1923,

that I last saw him alive on July 20, 1923,

and that death occurred on the date stated above at 7 P.M.

The CAUSE OF DEATH* was as follows:

Cancer of the Liver.

(duration) yrs. mos. ds.

CONTRIBUTORY Causes, if any, occurring

(Secondary) (duration) 15 yrs. 6 mos. ds.

18 Where was disease contracted

If not at place of death?.....

Did an operation precede death?..... Date of.....

Was there an autopsy?.....

What test confirmed diagnosis? Hemoptysis, spuunem

(Signed) Dr. Robert L. Roback, M.D.

July 20, 1923, Address

*State the Disease Causing Death, or in deaths from Violent

Causes, state (1) Means and Nature of Injury, and (2) whether Acci-

dental, Suicidal, or Homicidal.

(See reverse side for further instructions.)

19 PLACE OF BURIAL, CREMATION, OR REMOVAL

Date of Burial

July 23, 1923

Address

age 46

Registrar.

N. B.—EVERY ITEM OF INFORMATION SHOULD BE CAREFULLY SUPPLIED. AGE SHOULD BE STATED EXACTLY. PHYSICIANS SHOULD STATE CAUSE OF DEATH IN PLAIN TERMS, SO THAT IT MAY BE PROPERLY CLASSIFIED. EXACT STATEMENT OF OCCUPATION IS VERY IMPORTANT. SEE INSTRUCTIONS BELOW.

CERTIFICATE OF DEATH

(Approved by U. S. Census and American Public Health Association.)

Instructions to Registrar.—The registered number should be entered immediately upon receipt at your office, and the date of filing in your office and your signature as registrar should be entered at the same time on the face of the certificate in the lower left-hand corner.

Please examine the certificate carefully before making out the permit and call the attention of the undertaker or person in charge of the disposition of the body to any omissions. If any item *cannot* be obtained, the space should not be left blank nor a meaningless dash be used, but the word "Unknown" should be plainly written. Be particularly careful to see that the place of death is correctly stated. If out of your jurisdiction, do not register it, but see that it is filed with the registrar where the death occurred. It is not necessary to give the "Special Information," except for death in institutions, etc.

Do not fail to mail all certificates of death filed with you to the Michigan Department of Health, Lansing, Michigan, on the fourth (4th) day of the following month. Use the stamped return envelope provided for this purpose, and include a Statement Card, properly filled out in

Instructions to Sub-Registrars.—Licensed embalmers, when duly authorized by the State Health Commissioner to act as sub-registrars, may issue permits to themselves for deaths in villages or townships (but not in cities). They must first have the certificates completely and legibly filled out in ink, and must personally file all certificates with the registrars on or before the third day of the following month without fail. The certificates should not be numbered by the sub-registrars, but by the registrars who record and transmit as if originally filed with them.

Statement of Occupation.—Precise statement of occupation is very important, so that the relative healthfulness of various pursuits can be known. The question applies to each and every person, irrespective of age. For many occupations a single word or term on the first line will be sufficient, e. g., Farmer or Planter, Physician, Composer, Architect, Locomotive engineer, Civil engineer, Stationary Fireman, etc. But in many cases, especially in industrial employments, it is necessary to know (a) the kind of work and also (b) the nature of the business or industry, and therefore an additional line is provided for the latter statement; it should be used only when needed. As examples: (a) Spinner, (b) Cotton mill; (c) Salesman, (b) Grocery; (a) Foreman, (b) Automobile factory. The material worked on may form part of the second statement. Never return "Laborer," "Foreman," "Manager, "Dealer," etc., without more precise specifications, as Day laborer, Farm laborer, Laborer—Coal mine, etc. Women at home, who are engaged in the duties of the household only (not paid Housekeepers who receive a definite salary), may

be entered as Housewife, Housework, or At home, and children, not gainfully employed as At school or At home. Care should be taken to report specifically the occupations of the persons engaged in domestic service for wages, as Servant, Cook, Housemaid, etc. If the occupation has been changed or given up on account of the disease causing death, state occupation at beginning of illness. If retired from business, that fact may be indicated thus: Farmer, (retired 6 yrs.). For persons who have no occupation whatever, write None.

Statement of Cause of Death.—Name, first, the disease causing death (the primary affection with respect to time and causation), using always the same accepted term for the same disease. Examples: Cerebrospinal fever (the only definite synonym is "Epidemic cerebrospinal meningitis"); Diphtheria (Avoid use of "Croup"); Typhoid fever (never report "Typhoid pneumonia"); Lobar pneumonia; Bronchopneumonia ("Pneumonia," unqualified, is indefinite); Tuberculosis of lungs, meningitis; peritonaeum, etc.; Carcroma, Sarcoma, etc.; of... (name origin); "Cancer" is less definite; avoid use of "Tumor" for malignant neoplasms; Measles; Whooping cough; Chronic valvular heart disease; Chronic interstitial nephritis, etc. The contributory (secondary or intercurrent) affection need not be stated unless important. Examples: Measles (disease causing death), 29 ds.; Bronchopneumonia (secondary), 10 ds. Never report mere symptoms or terminal conditions, such as "Asthenia," "Anaemia" (merely symptomatic); "Atrophy," "Collapse," "Coma," "Convulsions," "Debility," "Dyspepsia," "Senile," etc.), "Dropsy," "Exhaustion," "Heart failure," "Haemorrhage," "Inanition," "Marasmus," "Old age," "Shock," "Uraemia," "Weakness," etc., when a definite disease can be ascertained as the cause. Always qualify all diseases resulting from childbirth or miscarriage, as "Puerperal septicæmia," "Puerperal Peritonitis," etc. State cause for which surgical operation was undertaken. For violent deaths state means of injury and quality as accidental, suicidal, or homicidal, or as probably such, if impossible to determine definitely. Examples: Accidental drowning; Struck by railway train—accident; Renovar wound of head—homicide; Poisoned by carbolic acid—probably suicide. The nature of the injury as fracture of skull, and consequences (e. g., sepsis tetanus) may be stated under the head of Contingency. (Recommendations on statement of cause of death approved by Committee on Nomenclature of the American Medical Association).

Note.—Certificates will be returned for additional information which give any of the following diseases, without explanation, as the sole cause of death: Abortion, cellulitis, childbirth, convulsions, haemorrhage, gangrene, gastritis, erysipelas, meningitis, miscarriage, necrosis, peritonitis, phlebitis, pyacma, septicæmia, tetanus.

NOTIFIABLE DISEASES

CLASS "A"

Chickenpox	Paratyphoid fever
Diphtheria	Pneumonia
Influenza	Poliomyelitis
Malaria	Scarlet fever
Measles	Smallpox
Measles, German	Tuberculosis, all forms
Meningitis, epidemic	Typhoid fever
Mumps	Whooping cough

CLASS "B"

Chancroid	Gonorrhea	Syphilis
-----------	-----------	----------

CLASS "C"

Erysipelas	Puerperal septicemia
Diarrhea and enteritis under two years of age.	

CLASS "D"

Ophthalmia neonatorum, any inflammation of the eyes of the newborn.	
Trachoma	

CLASS "E"

Anthrax	Rabies, in man
Cholera, Asiatic	Septic sore throat
Dysentery	Tetanus
Leprosy	Typhus fever
Plague	Yellow fever

CLASS "F"

Any disease or disability contracted as a result of the nature of the person's employment, including the following diseases or disabilities and not excluding others:

Anilin poisoning	Dinitrobenzine poisoning
Arsenic poisoning	Lead poisoning
Benzine (gasoline) poisoning	Mercury poisoning
Benzol poisoning	Naphtha poisoning
Bisulphide of carbon poisoning	Natural gas poisoning
Brass poisoning	Phosphorus poisoning
Carbon monoxide poisoning	Turpentine poisoning
Compressed-air illness	Wood alcohol poisoning

The list herewith included (fig.11) gives in full the diseases requiring notification.

In cases of scarlet fever and diphtheria, quarantine is supposed to be rather more rigid than in the case of other infectious diseases. In these cases the father is required to leave the house for the period of quarantine, if he must go to his business at all. The length of quarantine is fixed for each disease and the physicians must care for its enforcement, which unfortunately is not always done.

Fumigation has been discarded. Airing and washing of the wood work are now employed in its place.

(Fig.11)

MILK

Report on this city seems to be a series of indictments of incompetency, insufficiency and inefficiency. In the case of the milk supply, perhaps we may change the charge to that of ignorance and a state of lackadaisical indifference.

The city is supplied by 37 farms. Most of these send their milk to 8 city dairies. Previous to last Feby. there was no local milk inspector and whatever regulation of sale and production existed, was that of the over-worked and consequently none-too-careful, state Inspector. The State of Michigan has a rather excellent set of laws governing the dairy industry and I include in this article a copy of the state bulletin containing most of the chief laws (Fig. 12). It must appeal, however, as rather reasonable, that a total lack of local inspection can result only in the grossest negligence and the resulting distribution of unwholesome and insanitary milk products.

Some 6 months ago a milk inspector was appointed. He devotes only a small part of his time to the work, however, as he is employed in one of the paper mills of the city. Still, there has doubtless been a marked improvement due to even this bit of supervision.

The state ordinances provide for a cooling of the milk to 60 degrees or lower and it is expected that the milk should be delivered to the city dairies at no higher a temperature than this. The Inspector, realizing the difficulty the producer has in cooling with his in-

1921

STATE OF MICHIGAN

LAWS RELATING TO THE
BUREAU OF DAIRYING

COMPILED IN
DEPARTMENT OF AGRICULTURE



BY AUTHORITY

Lansing, Michigan
Wynkoop Hallenbeck Crawford Co.
State Printers
1921

$$\begin{array}{r} 70 \\ 37 \sqrt{27040} \\ \underline{273} \\ 70 \end{array}$$

1921

STATE OF MICHIGAN

LAWS RELATING TO THE

BUREAU OF DAIRYING

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LAWS PERTAINING TO DAIRY PRODUCTS.

(Act No. 26, Public Acts, 1873.)

AN ACT to prevent and punish offenders for the adulteration of milk, and the products made therefrom, and to repeal an act entitled "An act to prevent the adulteration of milk and to prevent the traffic in impure and unwholesome milk," approved March thirty-first, eighteen hundred and seventy-one.

(C. L., 15129) Section 1. *The People of the State of Michigan enact*, That whoever shall knowingly sell to any person or persons, or sell, deliver or bring to be manufactured to any cheese or butter manufactory in this State, any milk diluted with water, or in any way adulterated, or milk from which any cream has been taken, or milk commonly known as "skimmed milk," or shall keep back any part of the milk known as "strippings," with intent to defraud, or shall knowingly sell milk, the product of a sick or diseased animal or animals or any milk produced from any cow fed upon the refuse of a distillery, or of a brewery, or upon any substance deleterious to the quality of the milk, or shall knowingly use any poisonous or any deleterious material in the manufacture of any cheese or butter, or shall knowingly sell or offer to sell any cheese or butter, in the manufacture of which any poisonous or deleterious substance has been used, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined not less than ten dollars nor more than one hundred dollars, and may be committed to the county jail until such fine shall be paid: Provided, That such imprisonment shall not exceed ninety days; and shall be liable in double the amount of damages to the person or persons, firm, association, or corporation upon which such fraud shall have been committed. An act entitled "An act to prevent the adulteration of milk and to prevent the traffic in impure and unwholesome milk," approved March thirty-first, eighteen hundred and seventy-one, is hereby repealed. Provided, That any right accrued or forfeiture incurred under said act, shall remain valid and binding, and may be enforced under said act as if the same were not repealed.

Relative to
traffic in.

Penalty for
adulterating
or dealing in
such.

Proviso.
Double
damage.

Act repealed.

Proviso.

(Act No. 246, Public Acts, 1887.)

AN ACT to prevent the sale of impure, unwholesome, adulterated, or swill milk in the State of Michigan, and to provide for inspectors.

Unlawful to sell unwhole-some milk.

(C. L., 1513) Section 1. *The People of the State of Michigan enact,* That it shall be unlawful for any person, either by himself or agent, to sell or expose for sale within the State of Michigan any unwholesome, watered, or adulterated or impure milk or swill milk or colostrum or milk from cows kept upon garbage, swill or any substance in a state of fermentation or putrefaction or other deleterious substances, or from cows kept in connection with any family in which there are infectious diseases. The addition of water or ice to milk is hereby declared an adulteration.

[Am. by Act No. 219, P. A. 1889.]

Water or ice adulterations.

Penalty for violation.

Inspectors.

Duty of.

To make complaint.

(C. L., 15131) Sec. 2. Any person who shall violate any of the provisions of the preceding section shall be punished by a fine not to exceed one hundred dollars or (by) imprisonment not to exceed three months or by both such fine and imprisonment in the discretion of the court.

(C. L., 15132) Sec. 3. It shall be the duty of the metropolitan police commissioners of the city of Detroit, by and with the consent and advice of the board of health of the city of Detroit, to appoint an inspector who shall be a person of previous practical experience. Said inspector may be created captain, sergeant or roundsman of the said police force of the city of Detroit, at the option of the board of metropolitan police commissioners.

(C. L., 15133) Sec. 4. It shall be the duty of said inspector to personally view, so far as possible, all milk exposed for sale in said city, and to visit all dairy houses, barns or stables in said city or the county of Wayne, to inspect the same, and the animals held therein, and to visit all places where milk is kept or exposed for sale in the city of Detroit, and to inspect and ascertain the condition of said milk. He may detail any patrolman of said city to assist him in the performance of any or all of the duties enjoined on him by this act: Provided, always, That said inspector and any policeman so detailed shall always be subject to the provisions of the law establishing and governing the metropolitan police of said city.

(C. L., 15134) Sec. 5. It shall be the duty of said inspector or of his assistant, and of all other inspectors appointed under this act, to make complaint in writing before a police justice or justice of the peace, or other court having jurisdiction thereof, of every violation of this act coming to his knowledge.

[Am. by Act No. 219, P. A. 1889.]

(C. L., 15135) Sec. 6. Each and every quantity of separate milk sold or exposed for sale contrary to the provisions of this act, shall constitute a separate offense.

(C. L., 15136) Sec. 7. Any person who shall refuse to permit the said inspector, or his assistant (assistants) to perform his duty under this act, either by refusing him entrance to his premises or by concealing any milk, or refusing to permit any milk or animal or premises wherein animals are kept, to be viewed and inspected as herein provided, or by in any manner hindering or resisting any said inspector or assistant inspector in the performance of his duty, shall be guilty of a misdemeanor, and punished therefor.

(C. L., 15137) Sec. 8. Authority is hereby given the common council of any city, and the board of trustees or council of any village, to appoint an inspector of milk in any such city or village, and to fix their compensation, and when appointed the said inspectors of milk shall have all the power given by section four of this act, and shall perform all the duties required of inspectors of milk as provided herein, and such other powers and duties as may be conferred or imposed by the ordinances of said cities or villages.

(C. L., 15138) Sec. 9. Whoever shall adulterate by himself or his servant or agent, or sell, exchange or deliver, or have in his custody or possession with intent to sell or exchange the same, or exposes or offers for sale or exchange, adulterated milk or milk to which water or any foreign (substance) substances in any state of fermentation or putrefaction, or from sick or diseased cows, shall be guilty of a misdemeanor, and shall, for every such offense, be punished by a fine not exceeding one hundred dollars or by imprisonment in the county jail or the State House of Correction and Reformatory at Ionia not exceeding three months.

[Added by Act 219, P. A. 1889.]

(C. L., 15139) Sec. 10. Whoever shall adulterate, himself or by his servant, or agent, sell, exchange or deliver, or have in his custody or possession with intent to sell or exchange the same, or exposes or offers for sale as pure milk, any skimmed milk from which the cream or any part thereof has been removed shall be guilty of a misdemeanor, and shall for such offense, be punished by the penalty provided in the preceding section.

[Added by Act 219, P. A. 1889.]

(C. L., 15140) Sec. 11. Any dealer in milk who shall by himself, servant or agent, sell, exchange or deliver or have in his custody or possession with intent to sell, exchange or deliver the same, milk from which the cream or any part thereof has been removed, unless in a conspicuous place above the center upon the outside of every vessel, can or

Penalty. package from which any such milk is sold, the words "Skimmed milk" are distinctly painted in letters not less than one inch in length, shall be guilty of a misdemeanor and shall be punished by a fine not exceeding one hundred dollars or by imprisonment in the county jail or Detroit House of Correction not exceeding three months.

[Added by Act 219, P. A. 1889.]

Grade of milk.

(C. L., 15141) Sec. 12. If milk sold or offered for sale under the provisions of this act as pure milk, is shown upon analysis by weight to contain more than eighty-seven and fifty one-hundredths per centum of watery fluid, or to contain less than twelve and fifty one-hundredths of milk solids per centum, or less fat than three per centum, or if the specific gravity at 60 degrees Fahrenheit is not between 1 29-1000 to 1 33-1000, it shall be deemed to be adulterated. If milk sold or offered for sale under the provisions of this act as skimmed milk has a specific gravity at 60 degrees Fahrenheit less than 1.032 and greater than 1.037, it shall be deemed to be adulterated.

[Added by Act No. 219, P. A. 1889.]

Duty of inspector to test milk.

(C. L., 15142) Sec. 13. Whenever any inspector of milk has reason to believe that any milk found by him is adulterated, he shall take specimens thereof and test the same with such instrument or instruments as are used for such purposes, and he shall make an analysis thereof, showing total solids, the percentage of butter, the percentage of water and the percentage of ash; and if the result of such test and analysis indicates that the milk has been adulterated or deprived of its cream or any part thereof, the same shall be *prima facie* evidence of such adulteration in a prosecution under this act.

[Added by Act No. 219, P. A. 1889.]

Penalty clause.

(C. L., 15143) Sec. 14. Any person who shall remove the cream or any part thereof from milk to be sold as pure milk to any manufactory in which milk is used as a material in the process of production, and any person who shall, in any manner, adulterate such milk, either by the addition of water or otherwise, shall be guilty of a misdemeanor, and shall, for every such offense be punished by a fine not exceeding one hundred dollars or by imprisonment in the county jail or Detroit House of Correction not exceeding ninety days.

[Added by Act No. 219; P. A. 1889.]

(Act No. 106, Public Acts, 1899.)

AN ACT in relation to the sale and delivery of Milk.

(C. L., 6415) Section 1. *The People of the State of Michigan enact*, No person shall offer or expose for sale, sell, exchange or deliver, or have in his possession with intent to sell, exchange or deliver, any milk to which water, chemicals or preservatives, or any other foreign substances has been added. The term milk as used in this act shall include all skimmed milk, buttermilk, cream and milk in its natural state as drawn from the cow.

(C. L., 6416) Sec. 2. Whoever shall do any of the acts or things prohibited, or neglects or refuses to do any of the acts or things enjoined by this act, or in any way violates any of its provisions, shall be deemed guilty of a misdemeanor and shall be punished by a fine of not less than one dollar nor more than one hundred dollars and the costs of prosecution, or by imprisonment in the county jail not more than ninety days, or by both such fine and imprisonment in the discretion of the court.

This act is ordered to take immediate effect.

INSANITARY MILK AND CREAM.

(Act No. 222, Session Laws 1913.)

AN ACT to prevent and punish the sale of unclean and insanitary cream and milk and the use thereof in the manufacture of food products and to prohibit unclean and insanitary conditions of creameries, cheese factories, ice cream factories and milk dealers's establishments or outfitts and fixing standards of sanitary milk and cream, and to regulate the sale and transportation of the same.

(C. L., 6419) Section 1. *The People of the State of Michigan enact*, For the purpose of this act, the term "milk" shall mean the fresh, clean, lacteal secretion obtained by the complete milking of one or more healthy cows, properly fed and kept, excluding that obtained within eight days before and four days after calving, and contains not less than eight and one-half per cent of solids not fat, and not less than three per cent of milk fat; and the term "cream" shall mean that portion of milk, rich in milk fat, which rises to the surface of milk on standing, or is separated from it by centrifugal force, is fresh and clean and contains not less Cream defined.

Insanitary
milk defined.

than eighteen per cent of milk fat. Milk which shall be drawn from cows that are kept in barns or stables which are not reasonably well lighted and ventilated, or that are kept in barns or stables that are filthy from an accumulation of animal feces and excreta or from any other cause, or milk which shall be drawn from cows which are themselves in a filthy condition; or milk kept or transported in dirty, rusty or open-seamed cans or other utensils; or milk that is stale, putrescent, or putrid; or milk to which has been added any unclean, or unwholesome foreign substance; or milk which has been kept exposed to foul or noxious air or gases in barns occupied by animals, or kept exposed in dirty, foul or unclean places or conditions, is hereby declared to be insanitary milk. Cream produced from any such aforesaid insanitary milk; or cream produced by the use of a cream separator, which separator had not been thoroughly washed, cleansed and scalded after previous use in the separation of cream from milk; or cream produced by the use of a cream separator placed or stationed in any unclean or filthy room or place or in any building containing a stable wherein are kept cattle or other animals, unless such cream separator is so separated and shielded by a partition from the stable portion of such building as to be free from all foul or noxious air or gases which issue or may issue from such place or stable; or cream that is stale, putrescent, or putrid; or cream that is kept or transported in dirty, rusty or open-seamed cans or other utensils; or cream which has been kept exposed to foul or noxious air or gases in barns occupied by animals, or in dirty, foul or unclean places or conditions, is hereby declared to be insanitary cream.

Sale pro-
hibited.

(C. L., 6418) Sec. 2. No person shall by himself, his servant or agent, or as the servant or agent of any other person, or as the officer, servant or agent of any firm or corporation, sell or offer for sale, furnish or deliver, or have in possession or under his control with intent to sell or offer for sale, or furnish, or deliver to any person, firm or corporation as food for man, or to any creamery, cheese factory, milk condensing factory, or milk or cream dealer, any insanitary milk or any insanitary cream.

Manufacture
prohibited.

(C. L., 6419) Sec. 3. No person shall by himself, his servant or agent, or the servant or agent of any other person, or as the servant or agent of any firm or corporation, manufacture for sale any article of food for man from any insanitary milk or from any insanitary cream.

Insanitary
premises, etc.,
defined.

(C. L., 6420) Sec. 4. All premises and utensils used in the handling of milk, cream, and by-products of milk, and all premises and utensils used in the preparation, manufacture, or sale, or offering for sale of any food product for man from milk or cream or the by-products of milk, which shall be kept in an unclean, filthy or noxious condition are hereby declared to be insanitary. It shall be unlawful for

any person, firm, or corporation engaged in selling or furnishing milk, cream, or any by-products of milk, intended for use as food for man; and it shall be unlawful for any person, firm or corporation engaged in selling or furnishing milk, cream, or any by-products of milk, to any creamery, cheese factory, milk condensing factory, or to any place where such milk, cream, or by-products of milk are manufactured or prepared into a food product for man and for sale as such; and it shall be unlawful for any milk dealer, or an employe of such milk dealer, or any person, firm or corporation, or the employe of such person, firm, or corporation, who operates a creamery, cheese factory, milk condensing factory, or who manufactures or prepares for sale any article of food for man from milk, cream, or by-product of milk, or who manufactures, re-works, or packs butter for sale as a food product, to maintain his premises and utensils in an insanitary condition.

(C. L., 6421) Sec. 5. Any person, firm or corporation, not a common carrier who receives from a common carrier in cans, bottles or other vessels any milk, or cream, ice cream or other dairy product intended as food for man, which has been transported over any railroad or boat line or by other common carrier, when such cans, bottles or vessels are to be returned, shall cause the said cans, bottles, or other vessels to be thoroughly washed and cleansed before return shipment.

Cleansing of
containers
before return.

(C. L., 6422) Sec. 6. Any person who by himself, his servant or agent, or as the servant or agent of any other person, or as the officer, servant or agent of any firm or corporation, who violates any provision of this act shall, upon conviction thereof, be punished by a fine of not more than one hundred dollars for each and every offense, or shall be imprisoned in the county jail not more than sixty days.

Penalty for
violation.

CONDENSED MILK LAW.

(Act No. 176, Session Laws 1913)

AN ACT to regulate the sale of condensed milk, and to provide for the labeling thereof so as to prevent fraud and deception.

(C. L., 6423) Section 1. *The People of the State of Michigan enact,* Every container of evaporated, concentrated or condensed whole milk, and every container of evaporated, concentrated or condensed skimmed milk, sold or offered for sale or had in possession or custody with intent to sell by any person, firm or corporation within this State,

Labeling of
certain con-
tainers.

shall have plainly printed thereon in the English language, or attached thereto on some firmly affixed tag or label, a formula for extending the said evaporated, concentrated or condensed milk and said evaporated, concentrated or condensed skimmed milk, respectively, with water. The formula for the extension of said evaporated, concentrated or condensed whole milk shall be such that the resulting milk product shall not be below the Michigan standard of milk solids or fat for whole milk, and shall be in the following form: By adding..... parts of water to one part of the contents of this can a resulting milk product will be obtained which will not be below the legal standard for whole milk. The formula for the extension of said evaporated, concentrated or condensed skimmed milk shall be such that the resulting milk product shall not be below the Michigan standard of milk solids for skimmed milk, and shall be in the following form: By adding parts of water to one part of the contents of this can a resulting milk product will be obtained which will not be below the legal standard for skimmed milk.

Penalty for violation.

(C. L., 6424) Sec. 2. Whoever, himself or by his servant or agent, or as the servant or agent of any person, firm or corporation, sells, exchanges or delivers, or has in his custody or possession with intent to sell, exchange or deliver any container of evaporated, concentrated or condensed milk, within this State, not marked or labeled in compliance with the provisions of this act shall, for the offense, be punished by a fine of not more than one hundred dollars or by imprisonment for not less than three nor more than six months.

When effective.

(C. L., 6425) Sec. 3. The provisions of this act with reference to the labeling of containers of condensed, concentrated and evaporated skimmed milk shall take effect upon the first day of October, in the year nineteen hundred thirteen; the remaining provisions of this act shall take effect upon the first day of January in the year nineteen hundred fourteen.

OLEOMARGARINE.

(Act No. 63, Public Acts, 1913.)

AN ACT to regulate the manufacture, display, advertisement and sale of oleomargarine or imitation butter and to prevent fraud and deception therein and to provide penalties for violations thereof, and to repeal act number one hundred forty-seven of the Public Acts of eighteen hundred ninety-nine, entitled "An act in relation to the manufacture and sale of oleomargarine or imitation butter."

(C. L., 6395) Section 1. *The People of the State of Michigan enact*, No person shall sell, expose or offer for sale or exchange, or have in his possession with intent to sell or exchange, any oleomargarine or other substance made in imitation of butter, and which is intended to be used as a substitute for butter, unless each and every vessel, package, roll or parcel of such substance has distinctly and durably printed, stamped or stenciled thereon in black letters the true name of such substance, in ordinary bold faced capital letters, not less than five line pica in size; and also the name and address of the manufacturer, in ordinary bold faced letters, not less than pica in size.

(C. L., 6396) Sec. 2. No person shall sell, exchange or deliver any oleomargarine or other substance made in imitation of butter, and which is intended to be used as a substitute for butter, unless he shall also deliver to the purchaser of each and every roll, package or parcel of such oleomargarine or other substance, at the time of the delivery of the same, a distinct label, on which is plainly and legibly printed in black ink in ordinary bold faced capital letters not less than five line pica in size, the true name of such substance and also the name and address of the manufacturer, in ordinary bold faced letters not less than pica in size.

[Am. by Act No. 116, P. A. 1915.]

C. L., 6397) Sec. 3. The proprietor or keeper of any store, hotel, restaurant, eating saloon, boarding house, or other place where oleomargarine is sold or furnished to persons paying for the same, shall have placed on the walls of every store or room where oleomargarine is sold or furnished a white placard on which is printed in black ink, in plain Roman letters of not less than three inches in length, and not less than two inches in width, the words "Oleomargarine sold or used here", and shall at all times keep the same exposed in such conspicuous place as to be readily seen by any and all persons entering such store, or other room or rooms.

(C. L., 6398) Sec. 4. No person shall use in any way, "Butter" unlawful use of word, in connection or association with the sale or exposure

for sale or advertisement of any substance designed to be used as a substitute for butter, the word "butter", "creamy", or "dairy", or the name or representation of any breed of dairy cattle, or any combination of such word or words and representation, or any other words or symbols or combination thereof commonly used in the sale of butter.

"Butter"
what deemed.

(C. L., 6399) Sec. 5. For the purpose of this act the word "butter" shall be understood to mean the food product usually known as butter, and which is made exclusively from milk or cream, or both, with or without common salt, and with or without additional coloring matter.

Oleomargarine,
what des-
ignated as.

(C. L., 6400) Sec. 6. For the purpose of this act certain manufactured substances, certain extracts and certain mixtures and compounds, including such mixtures and compounds with butter, shall be known and designated as "oleomargarine," namely: All substances heretofore known as oleomargarine, oleo, oleomargarine oil, butterine, lardine, suine and neutral; all mixtures and compounds of oleomargarine, oleo, oleomargarine oil, butterine, lardine, suine and neutral; all lard extracts and tallow extracts; and all mixtures and compounds of tallow, beef fat, suet, lard, lard oil, vegetable oil, butterine, lardine, suine and neutral; all lard extracts and tallow extracts; and all mixtures and compounds of tallow, beef fat, suet, lard, lard oil, vegetable oil, intestinal fat, and offal fat, made in imitation or semblance of butter, or when so made, calculated or intended to be sold or used as butter or for butter.

Penalty for
violation.

C. L., 6401) Sec. 7. Whoever violates any of the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than fifty dollars, nor more than five hundred dollars, and the costs of prosecution, or by imprisonment in the county jail or State House of Correction and Reformatory at Ionia, for not less than six months nor more than three years, or by both such fine and imprisonment in the discretion of the court, for each and every offense. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

Repealing
clause.

(C. L., 6402) Sec. 8. Act number one hundred forty-seven of the Public Acts of eighteen hundred ninety-nine, is hereby repealed.

(Act No. 22, Public Acts, 1901.)

AN ACT to prevent deception in the manufacture and sale of imitation butter.

(C. L., 6393) Section 1. *The People of the State of Michigan enact*, No person, by himself or his agents, or servants, shall render or manufacture, sell, or offer for sale, expose for sale, or have in his possession with intent to sell, any article, product or compound made wholly or in part out of any fat, oil or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream of the same: *Provided*, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter.

(C. L., 6394) Sec. 2. Whoever violates any of the provisions of section one of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not less than fifty dollars nor more than five hundred dollars, and the costs of prosecution, or by imprisonment in the county jail or State House of Correction and Reformatory at Ionia for not less than six months nor more than three years, or by both such fine and imprisonment in the discretion of the court, for each and every offense.

RENOVATED BUTTER.

(Act No. 243, Public Acts, 1903, as amended.)

AN ACT in relation to the manufacture and sale of renovated butter.

(C. L., 6405) Section 1. *The People of the State of Michigan enact*, No person, firm or corporation shall manufacture for sale, offer or expose for sale, sell, exchange or deliver, or have in his possession with the intent to sell, exchange or deliver, any butter that is produced by taking original packing stock butter or other butter, or both, melting the same so that the butter fat can be drawn off or extracted, mixing the said butter fat with skimmed milk, or milk or cream, or other milk product, and rechurning or reworking the said mixture; nor shall any person, firm or corporation manufacture for sale, offer or expose for sale,

Unlawful to
manufacture
and sell imita-
tion butter.

Proviso.

Penalty for
violation.

To be
properly
labeled.

sell, exchange or deliver, or have in his possession for any such purpose any butter which has been subjected to any process by which it is melted, clarified or refined, and made to resemble butter, and is commonly known as boiled, process or renovated butter, and which for the purpose of this act is hereby designated as "Renovated Butter," unless the same shall be branded or marked as provided in section two of this act.

Tubs, etc., of
renovated
butter, how
labeled.

(C. L., 6406) Sec. 2. Whoever, himself or by his agent or as the servant or agent of another person, shall sell, expose for sale or have in his custody or possession with the intent to sell any renovated butter as defined in section one of this act, shall have the words "renovated butter" conspicuously stamped, labeled or marked in one or two lines and in plain Gothic letters, at least three eighths of an inch square, so that the words cannot easily be defaced, upon two sides of each and every tub, firkin, box or package containing said renovated butter; or if such butter is exposed for sale uncovered, or not in a case or package, a placard containing the said words in the same form as above described in this section shall be attached to the mass in such a manner as to be easily seen and read by the purchaser. When renovated butter is sold from such packages or otherwise at retail in print, roll or other form, before being delivered to the purchaser, it shall be wrapped in wrappers plainly stamped on the outside thereof with the words "renovated butter" printed or stamped thereon in one or two lines, and in plain Gothic letters at least three-eighths of an inch square, and such wrappers shall contain no other words or printing thereon, and said words "renovated butter" so stamped or printed on the said wrapper shall not be in any manner concealed, but shall be in plain view of the purchaser at the time of the purchase.

When placard
to be
attached.

How
wrappers to
be stamped.

Placard on
walls of hotels
restaurants,
etc.

The proprietor or keeper of any hotel, restaurant, eating saloon, boarding house, or other place where renovated butter is furnished to persons paying for the same, shall have placed on the walls of every store or room where renovated butter is furnished, a white placard on which is printed in black ink, in plain Roman letters of not less than three inches in length, and not less than two inches in width, the words "renovated butter used here," and shall at all times keep the same exposed in such conspicuous place as to be readily seen by any and all persons entering such store, hotel, restaurant or other room or rooms.

[Am. by Act No. 119, P. A. 1909. Am. by Act No. 15, P. A. 1915.]

Penalty for
violation.

(C. L., 6407) Sec. 3. Whoever shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not less than twenty-five dollars nor more than five hundred dollars, and the costs of prosecution, or by imprisonment in the county jail or Michigan Reformatory at Ionia.

for not less than six months nor more than three years, or by both such fine and imprisonment, in the discretion of the court, for each and every offense.

(C. L., 6408) Sec. 4. Act number two hundred fifty ^{Act repealed.} four of the Public Acts of eighteen hundred ninety-nine, entitled "An act to regulate the sale of butter produced by taking original packing stock and other butter and melting the same so that the butter oil can be drawn off, mixed with skimmed milk or other material, and by emulsion or other process produce butter, and butter produced by any similar process and commonly known as "process" butter; providing for the enforcement thereof, and punishment for the violation of the same," is hereby repealed.

BUTTER & CREAM STANDARDS.

(Act No. 182, Public Acts, 1913.)

AN ACT to regulate the sale of butter and cream in the State of Michigan, and to prescribe a penalty for the violation of this act.

(C. L., 6412) Section 1. *The People of the State of Michigan enact,* No person shall offer or expose for sale, have in his possession with intent to sell, or sell as butter any product which contains less than eighty per cent of milk fat, and which is not made exclusively from milk or cream, or both, with or without common salt and with or without additional coloring matter.

(C. L., 6413) Sec. 2. No person shall offer or expose ^{Cream.} for sale, have in his possession with intent to sell, or sell as cream any product which contains less than eighteen per cent of milk fat, and which is not that portion of milk, rich in milk fat, which rises to the surface of milk on standing, or is separated from it by centrifugal force, and which is not clean: Provided, That the provisions of this act shall ^{Proviso.} not be deemed to apply to any person not a manufacturer or producer of butter and cream, who has bought the products mentioned in this act for resale, and when found to be under the standard prescribed by this act, shall furnish information from whom his products were received.

(C. L., 6414) Sec. 3. Whoever shall do any of the acts ^{Misdemeanor.} or things prohibited, or wilfully neglect or refuse to do any of the acts or things enjoined by this act, or in any way violate any of its provisions, shall be deemed guilty of a misdemeanor, and where no specific penalty is prescribed by ^{Penalty.} this act shall be punished by a fine of not less than twenty-

Butter, when
unlawful to
sell, etc.

five nor more than one hundred dollars, or by imprisonment in the county jail for a period of not more than ninety days, or by both such fine and imprisonment in the discretion of the court.

ICE CREAM.

(Act No. 70, Public Acts, 1909.)

AN ACT to regulate the manufacture and sale of ice cream within the limits of the State of Michigan.

**Ice cream
lawful con-
stituents.**

(C. L., 6430) Section 1. *The People of the State of Michigan enact,* No person, firm or corporation shall manufacture for sale, keep for sale, sell, barter, exchange or deal in ice cream which shall contain any substance other than milk, cream, eggs, sugar, and some neutral flavoring gelatin or vegetable gums or which contain other than the required amount of milk fat as hereinafter provided.

**Sale of
adulterated
unlawful.**

(C. L., 6431) Sec. 2. No person, firm or corporation shall manufacture for sale, keep for sale, sell, barter, or deal in ice cream adulterated within the meaning of this act.

**Adulterated
ice cream
defined.**

(C. L., 6432) Sec. 3. Ice cream shall be deemed to be adulterated within the meaning of this act:

Proviso.

First, If it shall contain boric acid, formaldehyde, saccharin, or any other added substance or compound that is deleterious to health;

Second, If it shall contain salts of copper, iron oxide, ocre or any coloring substance deleterious to health: Provided, That this paragraph shall not be construed to prohibit the use of harmless coloring matter in ice cream when not used for fraudulent purposes;

Third, If it shall contain any deleterious flavoring matter, or flavoring matter not true to name;

Fourth, If it be an imitation of, or offered for sale under the name of another article;

Fifth, If it contains less than ten per centum milk fat, except where fruit or nuts are used for the purpose of flavoring when it shall not contain less than eight per centum milk fat. Nothing in this act shall be construed to prohibit the use of not to exceed seven-tenths of one per centum of pure gelatin, gum tragacanth or other vegetable gums.

[Am. by Act No. 224, P. A. 1913.]

Standard.

(C. L., 6433) Sec. 4. The standard of ice cream in this State and for the purpose of this act is hereby declared to be a frozen product made from milk, cream, eggs and sugar with or without a natural flavoring and the gums

mentioned in the preceding section and contains not less than ten per cent of milk fat. Fruit ice cream is a frozen product made from milk, cream, eggs and sugar and sound, clean, mature fruits, and contains not less than eight per cent of milk fat. Nut ice cream is a frozen product made from milk, cream, eggs, sugar and sound, non-rancid nuts, and contains not less than eight per cent of milk fat.

[Am. by Act No. 224, P. A. 1913.]

(C. L., 6434) Sec. 5. It shall not be lawful for any person, firm or corporation to sell, offer for sale, expose for sale, or have in possession with intent to sell, any ice cream in any container which is falsely labeled or branded as to the name of the manufacturer thereof or to misrepresent in any way the place of manufacture of ice cream or the manufacturer thereof.

(C. L., 6435) Sec. 6. Each person, firm or corporation engaged in the manufacture of ice cream as a business within this State, after this act shall take effect, shall file with the Food and Drug Commissioner (Commissioner of Agriculture) an application for a license accompanied with a fee of five dollars, and upon receipt of such application the Food and Drug Commissioner (Commissioner of Agriculture) shall issue to the person, firm or corporation making such application a license to manufacture ice cream, as provided in this act, which license shall run for one year from the date of the application, and shall be renewed annually thereafter.

The money so collected by the Food and Drug Commissioner (Commissioner of Agriculture) shall be paid into the State treasury and be used to help defray the expenses of the office of the Food and Drug Commissioner (Commissioner of Agriculture) in addition to the annual appropriation therefor: Provided, That this section shall not apply except in cities of more than three thousand inhabitants, by the last United States census, to any person, firm or corporation manufacturing and selling ice cream by the dish direct to the consumer.

(C. L., 6436) Sec. 7. Any person, firm or corporation who shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor and upon conviction shall be fined not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment in the county jail for not less than thirty days nor more than ninety days, or by both such fine and imprisonment in the discretion of the court.

(C. L., 6437) Sec. 8. The Food and Drug Commissioner (Commissioner of Agriculture) shall be charged with the enforcement of the provisions of this act. This act is ordered to take immediate effect.

(See Act No. 13, P. A. 1921, page 5.)

BABCOCK TEST.

(Act No. 280, Public Acts, 1907.)

AN ACT to regulate the sampling and testing of milk and cream and the use of the Babcock test and to make the violation of any provision hereof a misdemeanor.

Representative average sample.

(C. L., 6426) Section 1. *The People of the State of Michigan enact*, In taking samples of milk or cream from any milk can, cream can or any container of milk or cream, the contents of such milk can, cream can, or container of milk and cream shall first be thoroughly mixed either by stirring or otherwise and the sample shall be taken immediately after mixing, or by any other method which gives a representative average sample of the contents, and it is hereby made a misdemeanor to take samples by any method which does not give a representative average sample where milk or cream is bought or sold, and where the value of said milk or cream is determined by the butter fat contained in the same by the Babcock test.

Certain methods of misdemeanor.

Standard testing glassware.

Test bottles.

(C. L., 6427) Sec. 2. In the use of the Babcock test the term "standard Babcock testing glassware" shall apply to glassware complying with the following specifications:

(a) Standard Milk Test Bottles.

Graduation.—The total per cent graduation shall be eight per cent. The graduated portion of the neck shall have a length of not less than sixty-three five-tenths millimeters (two and one-half inches). The graduation shall represent whole per cent, five-tenths per cent, and tenths per cent. The tenth per cent graduations shall not be less than three millimeters in length; the five-tenths per cent graduations shall be one millimeter longer than the tenths per cent graduations, projecting one millimeter to the left; the whole per cent graduations shall extend at least one-half way around the neck to the right and projecting two millimeters to the left of the tenths per cent graduations. Each per cent graduation shall be numbered, the number being placed on the left of the scale. The arrow at any point of the scale shall not exceed one-tenth per cent.

Neck.—The neck shall be cylindrical and the cylindrical shape shall extend for at least nine millimeters below the lowest and above the highest graduation mark.. The top of the neck shall be flared to a diameter of not less than ten millimeters.

Bulb.—The capacity of the bulb up to the junction of the neck shall not be less than forty-five cubic centimeters. The shape of the bulb may be either cylindrical or conical with the smallest diameter at the bottom. If cylindrical, the outside diameter shall be between thirty-four and thirty-six mil-

limeters; if conical, the outside diameter of the base shall be between thirty-one and thirty-three millimeters, and the maximum diameter between thirty-five and thirty-seven millimeters.

The charge of the bottle shall be eighteen grams.

The total height of the bottle shall be between one hundred fifty and one hundred sixty-five millimeters (five and seven-eighths and six and one-half inches).

(b) Standard Cream Test Bottles.

Cream test bottles.

Two types of bottles shall be accepted as standard cream test bottles, a fifty per cent nine gram short-neck bottle and a fifty per cent nine gram long-neck bottle.

Fifty per cent nine gram short-neck bottles.—Graduation.—The total per cent graduation shall be fifty. The graduated portion of the neck shall have a length of not less than sixty-three five-tenths millimeters (two and one-half inches). The graduation shall represent five per cent, one per cent and five-tenths per cent. The five per cent graduations shall extend at least one-half way around the neck of the bottle (to the right). The five per cent graduations shall have a length intermediate between the five per cent and the five-tenths per cent graduations. Each five per cent graduation shall be numbered, the number being placed on the left of the scale. The arrow at any point of the scale shall not exceed fifteen-tenths per cent.

Neck. The neck shall be cylindrical and the cylindrical shape shall extend at least nine millimeters below the lowest and nine millimeters above the highest graduation mark. The top of the neck shall be flared to a diameter of not less than ten millimeters.

Bulb.—The capacity of the bulb up to the junction of the neck shall not be less than forty-five cubic centimeters. The shape of the bulb may be either cylindrical or conical with the smallest diameter at the bottom. If cylindrical, the outside diameter of the base shall be between thirty-one and thirty-three millimeters and the maximum diameter between thirty-five and thirty-seven millimeters.

The charge of the bottle shall be nine grams. All bottles shall bear on top of the neck above the graduations, in plainly legible characters, a mark defining the weight of the charge to be used (nine grams).

The total height of the bottle shall be one hundred fifty and one hundred sixty-five millimeters (five and seven-eighths and six and one-half inches) same as standard milk test bottles.

Fifty per cent nine gram long-neck bottles.—The same specifications in every detail as specified for the fifty per cent nine gram short-neck bottles shall apply for the long-neck bottle with the exception, however, that the total height of this bottle shall be between two hundred ten and two hundred thirty-five millimeters (eight and one-half and eight

and seven-eighths inches) and that the total length of the graduation shall be not less than one hundred twenty millimeters.

Standard Pipette.

The Standard Babcock Pipette.

Total length of pipette shall be not more than three hundred thirty millimeters (thirteen and one-fourth inches). Outside diameter of suction tube six to eight millimeters. Length of suction tube one hundred twenty millimeters. Outside diameter tube one hundred to one hundred twenty millimeters. Distance of graduation mark above bulb thirty to sixty millimeters. Nozzle straight. Delivery seventeen six-tenths cubic centimeters of water at twenty degrees C. in five to eight seconds.

Butter fat and cream scales.

All butter-fat and cream scales used for the purpose of determining the value or per cent of butter-fat content of milk or cream by the Babcock test shall be subject to the following specifications:

1. The scales shall be provided with a graduated face of at least ten divisions over which the pointer shall play.
2. The pointer must reach to the graduated divisions and shall terminate in a fine point to enable the readings to be made clearly and distinctly.
3. The clear interval between the divisions on the graduated face shall not be less than five one-hundredths inch.
4. All scales whose weight indications are changed by an amount greater than one-half the tolerance allowed, when set in any position on a surface making an angle of three degrees or approximately five per cent with the horizontal, shall be equipped with leveling screws and a device which will indicate when the scale is level: Provided, however, That the scale shall be rebalanced at zero each time its position is altered during the test.
5. The addition of one-half grain to the scale when loaded to capacity shall cause a movement of the pointer at least equal to one division on the graduated face.
6. The sensibility reciprocal and tolerance of cream test and butter-fat test scales shall be one half-grain (thirty milligrams). Every person, firm, company, association, corporation or agent thereof buying and paying for milk or cream on the basis of the amount of butter-fat contained therein as determined by the Babcock test shall use standard Babcock test bottles, pipettes and accurate weights and scales as defined in this act.

[Am. by Act 226, 1915.]

Unlawful reading of test.

(C. L., 6428) Sec. 3. It shall be unlawful for the owner, manager, agent or any employe of a cheese factory, creamery, condensed milk factory or milk depot or other place where milk or cream is tested for quality or value to falsely manipulate or under-read or over-read the Babcock

test, or make settlements on any other basis than the correct reading of the Babcock test or any other contrivance used for determining the quality or value of milk or cream where the value of said milk or cream is determined by the per cent of butter fat contained in the same or to make any false determination by the Babcock test or otherwise.

(C. L., 6429) Sec. 4. Whoever shall violate any of the provisions of this act shall be guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not less than ten dollars nor more than fifty dollars for each and every offense or be imprisoned in the county jail not less than ten days nor more than thirty days.

CERTIFIED MILK.

(Act No. 248, Public Acts, 1911.)

AN ACT providing for the incorporation of medical milk commissions, and certification of milk produced under their supervision.

(C. L., 5149) Section 1. *The People of the State of Michigan enact*, Authority is hereby given the board of health of any city, village or township in this State so constituted as to have in its membership two or more physicians duly authorized to practice medicine under the laws of this State, to appoint five physicians duly authorized to practice medicine under the laws of this State a medical milk commission for the purpose of supervising the production, transportation and delivery of milk, which it is intended to use for infant feeding, sickroom clinical purposes in said city, village or township. In cities, villages or townsips not having a board of health so constituted as above stated, the State Board of Health may make such appointment. All members of such milk commission shall have and possess all the powers and immunities provided by this act or any other act relating to the appointees of such board of health, while performing their duties as such appointees. One member of such commission shall be appointed and hold office from the time of such appointment until the end of the thirty-first of December, nineteen hundred eleven, one shall be appointed and hold office until the end of the thirty-first of December, nineteen hundred twelve, one shall be appointed and hold office until the end of the thirty-first of December, nineteen hundred thirteen, and one shall be appointed and hold office until the end of the thirty-first of December, nineteen hundred fourteen; one shall be appointed and hold office until the term of office.

Removal.

end of the thirty-first of December, nineteen hundred fifteen, and until their several successors are appointed and qualified. The term of office of each member of the commission, after the termination of the aforesaid terms shall be five years, and on the expiration of any term a new appointment shall be made in the same manner above prescribed. No more than one milk commission shall be appointed for any one city, village, or township. Any and all members of such commission may be removed at any time by the board which appointed them. Such medical milk commission shall make and file a certificate in writing in the manner hereinafter mentioned.

Certificates.

(C. L., 5150) Sec. 2. Such certificates shall set forth:
The name of such association, which shall be as hereinafter designated;
The purpose for which the association shall be formed;
The names and residences of the medical directors who shall manage the affairs of the association for the first year of its existence;
The city, village or township in this State where such association shall operate.

[Am. by Act 196, P. A. 1913.]

**How executed,
etc.**

(C. L., 5151) Sec. 3. Such certificate shall be executed in triplicate and acknowledged before some person within this State authorized to take the acknowledgment of deeds, and one copy thereof shall be filed in the office of the clerk of the county where the purposes of such association are to be carried out and one copy shall be filed in the office of the Secretary of State; said certificate or copy thereof duly certified by the said clerk or Secretary of State shall be evidence in all courts or places.

**Name of
commission.**

(C. L., 5152) Sec. 4. The name of such association shall be "The Medical Milk Commission of the (stating whether city, village or township) of (designating the name of city, village or township) (designating the name of the county) County of Michigan."

[Am. by Act 196, P. A. 1913.]

**By-laws,
amendments.**

(C. L., 5153) Sec. 5. Such medical directors shall have the power from time to time to make, alter and amend by-laws not inconsistent with the constitution and laws of the United States and of this State, and to appoint such agents and officers as shall in their judgment tend to promote or advance any purpose or purposes of such commission, and to prescribe their respective duties; and for the regulating of the conditions under which milk shall be produced by any dairymen or dairymen under contract with such commission.

(C. L., 5154) Sec. 6. No medical director of any association organized under this act shall receive directly or indirectly, from such association or dairyman, or dairymen producing milk under agreement with such commission, any salary or emolument or any compensation of any kind or character for any services rendered under the provisions of this act, and any medical director who shall receive any salary, emolument or any compensation of any kind or character for such services, shall be liable to a penalty of one hundred dollars to be recovered in an action of debt by the association of which he is a member, and in addition thereto shall be removed from his office as a member of said association, and thereafter disqualified from becoming a member of any association incorporated under the provisions of this act.

(C. L., 5155) Sec. 7. Every such association shall have the power to enter into agreement in writing with any dairymen or dairymen for the production of milk under the supervision of such association for the purposes enumerated in section one hereof, and to prescribe in such agreement the conditions under which such milk shall be produced, which conditions however, shall not be below the standards of purity and quality for certified milk as fixed by the American association of medical milk commissions, and the standards for milk now fixed or that may hereafter be fixed by the Board of Health of the State of Michigan. In any contract entered into by any such commission with any dairyman or dairymen, it may be provided that such medical milk commission may designate any analyst, chemist, bacteriologist, veterinarians, medical inspectors or other persons who in its judgment may be necessary for the proper carrying out of the purposes of such commission for employment of such dairyman or dairymen, and to prescribe and define their powers and duties, and that such persons so employed by such dairyman or dairymen may be discharged from employment whenever such medical milk commission may request such discharge or removal in writing.

(C. L., 5156) Sec. 8. All containers of any kind or character used in the carrying or distribution of milk produced by any dairyman or dairymen under contract with any medical milk commission shall have attached thereto or placed thereon a certificate or seal bearing the name of the medical milk commission with which such dairyman or dairymen producing such milk shall be under contract, which certificate shall have printed, stamped or written thereon the day or date of the production of the milk contained in any such container and the words "certified milk" in plain and legible form.

(C. L., 5157) Sec. 9. The work and methods of any milk commission organized under this act and of the dairies of which milk is produced under contract with any such

Compensation, unlawful to receive.

Penalty.

Powers of association.

Containers to have seals.

Investigation.

commission, shall at all times be subject to investigation and scrutiny by the local board of health and the Board of Health of the State of Michigan. The Secretary of said State Board of Health and the local health officer shall be ex-officio members of every milk commission organized under this act.

Standard of
milk.
Sale of.

(C. L., 5158) Sec. 10. No person, firm or corporation shall sell or exchange or offer or expose for sale or exchange in any city, village or township as and for certified milk, any milk which is not certified by the medical milk commission of that city, village or township, and which is not produced in conformity with the methods and regulations for the production of certified milk from time to time adopted by the American association of medical milk commissions, and which is below the standards of purity and quality for certified milk as fixed by the American association of medical milk commissions.

[Am. by Act 196, P. A. 1913.]

Penalty.

(C. L., 5159) Sec. 11. Whoever shall by himself, servant or agent sell, exchange or deliver or have in his custody with intent to sell, exchange or deliver, or offer or expose for sale in any city, village or township as certified milk, any milk which has not been certified by the medical milk commission of that city, village or township, or shall violate any of the provisions of this act, shall upon conviction thereof be deemed guilty of a misdemeanor, and shall be punished by a fine of not less than fifty dollars nor more than five hundred dollars, or by imprisonment in the county jail not more than ninety days, or by both such fine and imprisonment in the discretion of the court.

[Am. by Act No. 196, P. A. 1913.]

Repealing
clause.

(C. L., 5160) Sec. 12. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

OLEOMARGARINE IN PUBLIC INSTITUTIONS.

(Act No. 45, Public Acts of 1891.)

AN ACT to prohibit the use of oleomargarine, butterine, or any other substitute for butter in any of the public institutions of this State, and to provide the punishment therefor.

Use pro-
hibited.

(C. L., 1958) Section 1. *The People of the State of Michigan enact,* That the use of oleomargarine, butterine or any other substitute for butter, in any of the public institu-

tions of this State, be and the same is hereby prohibited, except in the penal institution of the State.

[Am. by Act No. 233, P. A. 1913.]

(C. L., 1959) Sec. 2. Any warden, superintendent or other officer of any such institution, who shall knowingly violate the provisions of section one of this act, or shall knowingly permit the same to be violated shall be deemed guilty of a misdemeanor and every violation shall constitute a separate offense and on conviction thereof shall be punished by a fine of not less than twenty-five, nor more than one hundred dollars, together with costs of prosecution, or by imprisonment in the county jail of the county in which said institution is situated, not exceeding ninety days, or both such fine and imprisonment, at the discretion of the court.

MILK BOTTLES.

(Act No. 257, Public Acts of 1911.)

AN ACT to prohibit drivers of milk wagons and unauthorized persons from opening milk bottles, or in any way interfering with or molesting the caps or covers thereof after such bottles shall have been closed at the creamery, and during and after the process of delivery to patrons.

(C. L., 5164) Section 1. *The People of the State of Michigan enact*, From and after the date on which this act takes effect, it shall be unlawful for any driver of any milk wagon, or any distributor of milk, or any person whatsoever, except legally authorized milk inspector and persons to whom such milk is delivered, to open milk bottles or in any way interfere with or molest the caps or covers of the same after such milk bottles shall have been closed at the creamery, or during the process of the delivery of said milk or, after said milk shall have been delivered in due course of business and in the ordinary manner.

(C. L., 5165) Sec. 2. Any person violating any of the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof in a court of competent jurisdiction shall be punished by a fine of not less than fifty dollars nor more than one hundred dollars, or by imprisonment in the county jail for not less than thirty days nor more than ninety days, or by both such fine and imprisonment in the discretion of the court.

STATE BRAND FOR BUTTER.

(Act No. 53, Public Acts, 1915.)

AN ACT to provide for a State brand for Michigan butter, for the purpose of insuring a higher standard of excellence and quality, a more uniform butter market, and to insure a more healthful product for consumption at home and abroad, and to regulate the use of such mark or brand.

Who may use. (C. L., 6270) Section 1. *The People of the State of Michigan enact,* Any person, firm or corporation manufacturing butter in this State may use the brand, mark or label therefor as provided in this act.

Who to have charge. (C. L., 6271) Sec. 2. Said trade mark or brand and its use and regulation shall be in charge of and under the control of a commission of three members consisting of the State Food and Drug Commissioner (Commissioner of Agriculture), the President of the Michigan State Dairymen's Association and the President of the Michigan State Butter Makers' Association.

Rules and regulations. (C. L., 6272) Sec. 3. The State trade mark or brand shall be controlled, used, manufactured and issued under such rules and regulations as may be found necessary from time to time by the said commission. Said commission or commissioners shall have power to make such changes in the rules and regulations for the use of said trade mark or brands as it may deem necessary from time to time.

Publication of rules. (C. L., 6273) Sec. 4. The rules governing the use of such trade mark or brand shall be published by and through bulletins issued by the State Food and Drug Department, (Department of Agriculture). Such labels, stamps or other means of imprinting such trade mark or brand upon the manufactured product or the receptacles containing the same, shall be furnished to those entitled to the use thereof by the State Food and Drug Department (Department of Agriculture).

Copyright of brand. (C. L., 6274) Sec. 5. The said commission is hereby directed and authorized to secure a copy-right under the laws of the United States for trade-marks or brands, and copyrights for such trade-mark or brand of butter. Said trade-mark, brand, or label shall be of such size and design as the said commission shall designate and shall contain in prominent letters, the words, "Michigan butter, License Number," and the words, "State Butter Control."

Description of brand. (C. L., 6272) Sec. 6. Any person, firm or corporation desiring to use the brand or label provided for in this act in the manufacture or sale of butter shall make written application for a license therefor to the dairy and food com-

Application for license.

missioner, which application shall describe by location and name the creamery or factory in which such butter is to be manufactured, and give such other information as may be required. A license shall be granted to such person, firm or corporation to use such brand or label at the factory described in the application, if on investigation by the Food and Drug Commissioner (Commissioner of Agriculture), his deputy or duly authorized assistants, it appears that all the provisions of this act and the rules and regulations by the commission have been complied with. Such license shall state that the brand or label provided for by the said commission may be used in connection with the manufacture or sale of butter from the factory described in such license. Such factories so described shall be given the same number as the serial number of the license.

Where
license
granted.

What to
state.

(C. L., 6276) Sec. 7. No person, firm or corporation shall use in the manufacture or sale of butter such brand or label without having first obtained a license therefor as provided in this act. Such license so granted may be revoked by the said commissioner if any of the conditions of this act or of the rules and regulations of the commission are not complied with. Such license so granted shall not be transferable.

Unlawful use
of brand.

Revocation
of license not
transferable.

(C. L., 6277) Sec. 8. The use of any brand or mark for butter or butter substitute resembling the above brand or so near like it that it can be confounded with it, is prohibited.

Similar
brands
prohibited.

(C. L., 6278) Sec. 9. Any person, firm or corporation violating any of the provisions of this act shall be deemed guilty of a misdemeanor and on conviction thereof shall be fined not more than one hundred dollars or imprisoned in the county jail for not more than thirty days.

(See Act No. 13, P. A. 1921, page 5.)

STANDARD MILK BOTTLES.

(Act No. 154, Public Acts, 1915.)

AN ACT to prevent fraud and deception in the sale of milk and cream, providing standard milk bottles and for the sealing thereof.

C. L., 6279) Section 1. *The People of the State of Michigan enact*, On and after January one, nineteen hundred sixteen, bottles used for the sale of milk and cream in this State shall be of the capacity of half gallon, three pints, one quart, one pint, ten ounces, half pint, one gill filled full

Capacity of
milk bottles.

Variations allowed.

to the bottom of the lip. The following variations on individual bottles or jars may be allowed: Six drams above and six drams below on the half gallon; five drams above and five drams below on the three pint; four drams above and four drams below on the quart; three drams above and three drams below on the pint; two and one-half drams above and two and one-half drams below on the ten ounce; two drams above and two drams below on the half pint; two drams above and two drams below on the gill. But the average contents of not less than twenty-five bottles selected at random from at least four times the number tested must not be in error by more than one-quarter of the tolerances: One and five-tenths drams above and one and five-tenths drams below on the half gallon; one and twenty-five hundredths drams above and one and twenty-five hundredths drams below on the three pint; one dram above and one dram below on the quart; seventy-five hundredths drams above and seventy-five hundredths drams below on the pint; seventy-five hundredths drams above and seventy-five hundredths drams below on the ten ounce; five-tenths drams above and five-tenths drams below on the half pint; five-tenths drams above and five-tenths drams below on the gill. Bottles or jars used for the sale of milk shall have clearly blown or otherwise permanently marked in the side of the bottle, the capacity of the bottle and the word "sealed" and in the side or bottom of the bottle the name, initials or trade-mark of the manufacturer and designating number, which designating number shall be different for each manufacturer and may be used in identifying the bottles. The designating number shall be furnished by the State Superintendent of Weights and Measures upon application by the manufacturer, and upon filing by the manufacturer of a bond in the sum of one thousand dollars with sureties to be approved by the Attorney General, conditioned upon their performance of the requirements of this section. A record of the bonds furnished, the designating numbers, and to whom furnished, shall be kept in the office of the Superintendent of Weights and Measures.

What to be blown in bottles.

Designating number.

Bond.

Records.

Unlawful sales.

Penalty.

Unlawful use of bottles.

Bottles not to be sealed.

(C. L., 6280) Sec. 2. On and after January one, nineteen hundred sixteen, any manufacturer who sells milk or cream bottles to be used in this State, which do not comply as to size and markings with the provisions of this act, shall suffer the penalty of five hundred dollars, to be recovered by the Attorney General in an action against the offender's bondsmen, to be brought in the name of the people of the State. Any dealer who uses, for the purpose of selling milk or cream, jars or bottles purchased after this law takes effect, which do not comply with the requirements of this act as to markings and capacity, shall be deemed guilty of using false or insufficient measure.

(C. L., 6281) Sec. 3. Sealers of weights and measures are not required to seal bottles or jars for milk or

cream marked as in this act provided, but they shall from time to time make tests on individual bottles used by the various firms in the territory over which they have jurisdiction, in order to ascertain whether the above provisions are being complied with, and they shall report violations found immediately to the Superintendent of Weights and Measures. Any dealer who knowingly uses for the purpose of selling milk or cream, jars or bottles purchased after this law takes effect, which do not comply with this act as to marking the capacity, shall be guilty of a misdemeanor and be punished accordingly.

PASTEURIZATION.

(Act No. 93, Public Acts, 1915)

AN ACT to provide for pasteurizing the by-products of cheese factories, creameries, skimming stations and other places where milk is received and distributed.

(C. L. 6333) Section 1. *The People of the State of Michigan enact*, Every owner, operator or manager of a cheese factory, creamery, skimming station or other place where milk is received and the by-products distributed, shall, before returning to or delivering to any person or persons any skim milk, whey, buttermilk or other milk by-products to be used for feeding purposes for farm animals, cause such skim milk, whey, buttermilk, or other milk by-products to be thoroughly pasteurized by heating the same to one hundred forty-five degree Fahrenheit and holding at that temperature for not less than thirty minutes or to one hundred eighty-five degrees without holding: Provided, That the provisions of this act shall not apply to cheese factories or creameries that pasteurize the milk or cream prior to manufacture.

(C. L., 6334) Sec. 2. Whoever violates any of the provisions of this act shall be deemed guilty of a misdemeanor, and on conviction shall be punished by a fine of not more than one hundred dollars, or imprisonment in the county jail for not exceeding ninety days, or both, in the discretion of the court.

Tests to be made.

Penalty.

By products to be pasteurized.

Proviso when act not to apply.

ACT NO. 409, PUBLIC ACTS 1919

AN ACT to provide for the licensing of "Babcock test" operators, and to provide a penalty for the violation of the provisions of this act.

License required.

Fee.

Rules and regulations.

Hearings.

Term of license.

Revocation of license.

Proviso, hearing.

Appeals.

Penalty.

Section 1. *The People of the State of Michigan enact,* Every person, who shall test milk or cream in this State by the Babcock method for the purpose of determining the percentage of butter or milk fat contained therein, where such milk or cream is bought and paid for on the basis of the amount of butter or milk fat contained therein, shall first obtain a license from the Food and Drug Commissioner (Commissioner of Agriculture). A license fee of one dollar for each license so granted shall be paid to the Food and Drug Commissioner (Commissioner of Agriculture).

Sec. 2. The Food and Drug Commissioner (Commissioner of Agriculture) shall establish and promulgate rules and regulations, not inconsistent with the provisions of this act, that shall govern the granting of all licenses provided for in this act, provided that before such proposed rules and regulations are promulgated, a copy of said proposed rules and regulations shall be submitted to the secretary of each interested trade association at least thirty days before the same are promulgated, and thereafter, upon request of any interested trade association and any other interested parties, the Food and Drug Commissioner (Commissioner of Agriculture) shall give said association and any other interested parties, a hearing on said rules and regulations. All licenses so granted shall run for one year from the date of issue, unless sooner revoked as provided for in section six of this act, and shall be renewed annually thereafter.

Sec. 3. The Food and Drug Commissioner (Commissioner of Agriculture) shall have power to revoke any license granted under the provision of this act, upon good and sufficient evidence that the provisions of this act, or the rules and regulations of the Food and Drug Commissioner (Commissioner of Agriculture), are not being complied with: *Provided*, That before any license shall be revoked, an opportunity shall be granted licensee, upon being confronted with the evidence, to show cause why such license should not be revoked.

Sec. 4. Any licensee who feels aggrieved at the decision of the Food and Drug Commissioner (Commissioner of Agriculture) may appeal from said decision within ten days by writ of certiorari, to the circuit court of the county where licensee resides, and an issue shall be framed in said court, and a trial had, and its decision shall be final unless an appeal is taken to the Supreme Court.

Sec. 5. Any person violating any of the provisions of this act shall be deemed guilty of a misdemeanor and upon conviction

J. D. Harrington
328 Lincoln Av

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74-215

MONROE STATE SAVINGS BANK

MONROE, MICHIGAN,

— 1 —

**PAY TO THE
ORDER OF**

A blank check template featuring a decorative border made of horizontal and vertical lines forming a grid. A signature line is positioned at the top center.

tion thereof shall be punished by a fine of not more than one hundred dollars and the costs of prosecution, or by imprisonment in the county jail for a period of not more than two months, or both such fine and imprisonment in the discretion of the court. All acts or parts of acts contravening the provisions of this act are hereby repealed.

(Act No. 221, Public Acts 1921.)

AN ACT to prevent fraudulent and dishonest practices in making official or semiofficial records of milk and butter fat production of cows.

Section 1. *The People of the State of Michigan enact,* Any person who shall connive at, commit, or attempt to commit any fraudulent or dishonest practice in connection with the making of official or semiofficial records of milk and butter fat production of cows, shall be guilty of a misdemeanor, and upon conviction thereof before any court of competent jurisdiction shall be punished by a fine of not more than one thousand dollars or by imprisonment in the county jail for not more than six months, or by both such fine and imprisonment in the discretion of the court.

adequate water supply, raised the figure to 67 degrees and yet, he found it necessary to make arrests. He found milk being brought in at 80 to 85 degrees.

The state has fixed a maximum permissible bacterial count- 200,000 per c.c.- yet what does this mean in Monroe? Just this- that so far as could be ascertained, no sample has every undergone examination . There is no one equipped to examine the milk in the city and no sample has every been sent to the State laboratory. This,in the face of the fact that - - - - ; -

Only one dairy in Monroe pasteurizes its milk . All milk except the five hundred or six hundred quarts distributed by Bernard's dairy, is raw. Is it ignorance, disinterest, or down right stubbornness? One cannot say. There seems a stubborn view point among all those concerned in the industry, that raw milk is the superior product- that pasteurization is a method,which while offering some safeguards, does so only at the cost of producing an insipid,hardly worth while fluid in place of a rich, nutritious and delicious food. It seems a rather startling fact that not one bit of certified milk is marketed in the city. There could not be. No medical milk commission exists there, and it is only to be expected that a group of producers who object strenuously to simple cooling would be in no way willing to take the steps and care,necessary in production of certified milk.

The city dairy of Bernard is,as previously mentioned, the sole source of pasteurized milk.

They draw their supply from seven farms. The establishment is located in the basement of Mr. Bernard's residence. There are two rooms, both cement floored and reasonably clean. The first room contains the pasteurizer, a large metal vat containing the coils thru which circulates the hot water. The second room contains the bottle washer and sterilizer.

The milk is poured into the pasteurizer and cooled until time for pasteurization when the temperature is raised to 145 degrees and maintained for 30 minutes. The milk is then cooled and bottled, no further attempt being made to keep it at a low temperature.

The bottles are washed with a hot water spray, followed by steam for a minute or two.

The whole outfit is a step ahead, though doubtless an outside dairy and more careful methods of handling the milk, both before and after bottling, are steps which are yet to be anticipated.

It was a pleasure in the face of all the fact set forth above, to visit and inspect the Woodlawn Farm Dairy. The property of G.W.Woods, a wealthy manufacturer of Monroe, the farm is well nigh perfect, so far as equipment goes. It is under the supervision of an intelligent and well trained dairyman. The pictures herewith included give evidence of the excellent order and condition of the farm. (Figs.13,14,15.)

The cows are all thorough bred Guernseys and are kept



Fig.13

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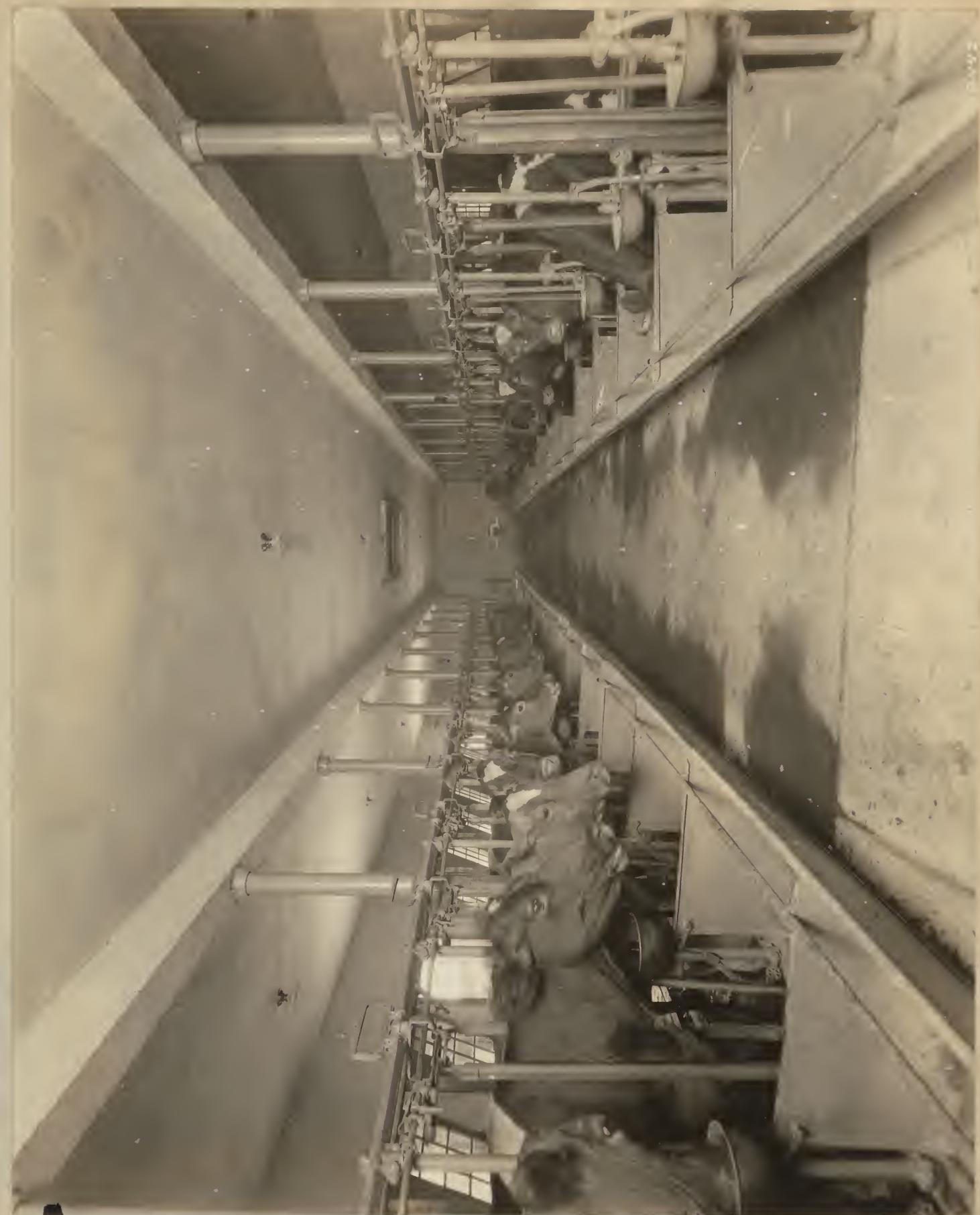


Fig.14



Fig.15

in admirable conditions of cleanliness. The affixed score card (Fig.16) shows the layout very graphically. The cows /^{number} 59, 49 of which are housed in a well lighted, dry spacious barn. The walls are of cement and the flooring are of some synthetic material which resembles stone but is a resilient as rubber. This eliminates the necessity of providing straw during the summer. There is a sliding door up to the loft which when opened provides increased cooling facilities .

These cows are groomed with ~~a~~ care accorded a race horse and present an unforgettable picture of dazzling , healthy, wholesome cleanliness . The animals are tuberculin tested,having been inoculated thrice in 11 months without a single positive reaction; however, the herd remains on the National black list, due to the numerous tubercular herds which are its neighbors.

Ten cows are housed in an old style barn pending completion of an addition to the present large barn. Here they occupy ordinary box stalls,enjoying more room, if less light than the other animals.

Pasteurization is not practiced. The milk is collected in covered buckets and the product of each cow is immediately poured into the cooler(Fig. 17), bottled and stored in a modern and very efficient cold room.

UNITED STATES DEPART
BUREAU OF ANI
DAIRY D

SANITARY INSPECTIO

SCORE

Indorsed by the Official Da

Owner or lessee of farm G. H.

P. O. address Mannan

Total number of cows 59

Gallons of milk produced daily

8-3278

Inspector.



Fig. 17

Fig. 16



EQUIPMENT.	SCORE.		METHODS.	SCORE.	
	Perfect.	Allowed.		Perfect.	Allowed.
COWS.					
Health	8	6	Clean (Free from visible dirt, 6.)	8	8
Apparently in good health	1				
If tested with tuberculin within a year and no tuberculosis is found, or if tested within six months and all reacting animals removed	5				
(If tested within a year and reacting animals are found and removed, 3.)					
Food (clean and wholesome)	1	1			
Water (clean and fresh)	1	1			
STABLES.					
Location of stable	2	1	Cleanliness of stables	6	5
Well drained	1		Floor	2	
Free from contaminating surroundings	1		Walls	1	
Construction of stable	4	4	Ceilings and ledges	1	
Tight, sound floor and proper gutter	2		Mangers and partitions	1	
Smooth, tight walls and ceiling	1		Windows	1	
Proper stall, tie, and manger	1		Stable air at milking time	5	5
Provision for light: Four sq. ft. of glass per cow	4	4	Freedom from dust	3	
(Three sq. ft., 3; 2 sq. ft., 2; 1 sq. ft., 1. Deduct for uneven distribution.)			Freedom from odors	2	
Bedding	1	1	Cleanliness of bedding	1	
Ventilation	7	6	Barnyard	2	1
Provision for fresh air, controllable flue system	3		Clean	1	
(Windows hinged at bottom, 1.5; sliding windows, 1; other openings, 0.5.)			Well drained	1	
Cubic feet of space per cow, 500 ft	3		Removal of manure daily to 50 feet from stable	2	2
(Less than 500 ft., 2; less than 400 ft., 1; less than 300 ft., 0.)					
Provision for controlling temperature	1				
UTENSILS.					
Construction and condition of utensils	1	1			
Water for cleaning	1	1			
(Clean, convenient, and abundant.)					
Small-top milking pail	5	5			
Milk cooler	1	1			
Clean milking suits	1	1			
MILK ROOM OR MILK HOUSE.					
Location: Free from contaminating surroundings	1	1			
Construction of milk room	2	1			
Floor, walls, and ceilings	1				
Light, ventilation, screens	1				
Separate rooms for washing utensils and handling milk	1	1			
Facilities for steam	1				
(Hot water, 0.5.)					
Total	40	36	Total	60	48

Equipment 36 1/2 + Methods 48 = 84 1/2 Final Score.

NOTE 1.—If any exceptionally filthy condition is found, particularly dirty utensils, the total score may be further limited.

NOTE 2.—If the water is exposed to dangerous contamination, or there is evidence of the presence of a dangerous disease in animals or attendants, the score shall be 0.

It is noteworthy that every care is taken in the bottling process. The bottles are automatically washed and treated with live steam, the milk is run in and the caps (which are bought in large sterile packages) are put on by a machine. Thus, contact with human hands is entirely obviated.

As has been remarked, the equipment is admirable but since no dairy is entirely above criticism it is not strange that this farm, located in the midst of a country where dairy hygiene is at a very low ebb and carelessness is riot, should present certain aspects of its methods which cry for a remedy. Firstly: It should be recognized that fresh milking suits are essential and this rule was not evidently incorporated in the code. The milkers moreover were not even over zealous in cleansing their hands, then too- there was the undesirable habit of passage of milkers from stable to dairy and bottling room, although since pasteurization is not employed, this is of less importance. The brushing of udders is not a method to be condemned, but the damp cleansing is undoubtedly more efficient.

The milk produced here is an excellent, rich product with an unusually heavy cream line. Yet all in all, I should feel better using milk, not from any of these dairies, even one such as this. The process of pasteurization, so universally frowned upon, by Monroe milk producers, offers the consumer an extremely sound foundation for feeling safe in the use of this important food.

Clean milkers, healthy contented cattle, good surroundings and immaculate utensils are excellent but not sufficient. The appointment of an Inspector was amove in the proper direction. Doubtless in due time, the dairies will all be models. However at present those which observe ordinary, hygenic precautions are few and the milk entering the city is, all in all, an unsafe food. The people have been fortunate. Epidemics have not occurred traceable to the milk , yet it canot be doubted that sooner or later the hand of fate, will fall heavily on Monroë and diphtheria, typhoid, or some other milk born infection will scourge the city. The fulfillment of this dire prophecy or its non-fulfillment lies in the hands of the populace.

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SANITARY NUISANCES

SOURCES OF ODORES

The industries of Monroe are not those which commonly give rise to objectional odors so on that score the city escapes an unpleasant matter to handle. There are no large slaughter houses in the vicinity nor any of the ordinary sources of odors. In the course of carrying out the survey, the chief point of offense seem to be the dumping grounds where the garbage is so inefficiently treated. (vide supra- "Garbage") . The odors arising from these grounds are at times very offensive but do not tend to spread very far from the immediate proximity of the causative material. The remedy is that suggested under the chapter dealing with Garbage & Refuse.

DUST

The municipality is, as yet, not blessed with numerous paved streets. There are $22\frac{1}{2}$ miles of unpaved as against 11 miles of paved streets. Naturally, where there/dirt streets there is dust unless some means of settling it is employed. Oil was tried but was rather a dirty and unsatisfactory method. At present calcium chloride is being used with success. It is sprinkled over the road ways and by absorbing the moisture from the air, keeps the dust moistened and thus prevents its rising. Until the streets are finally paved, this method needs no substitute or revision.

The paved streets are watered and cleaned by automatic mechanisms in an entirely satisfactory manner.

RUBBISH

One must go a long distance in search of a city where

there are no unsightly rubbish heaps or unsanitary dumps either small or large and Monroe is not an exception to the usual rule. In addition to the two large city dumps spoken of in an earlier chapter, there are encountered here and there, rubbish piles and small heaps of refuse such as the one illustrated in Fig.18- which was taken next to a railway track within 150 feet of well populated neighborhood.



Fig.18

Note basket with coffee grounds,
Also fresh vegetables, tin cans, and
soggy refuse.

The surprising thing is that there is not greater carelessness in view of the inadequate functioning of the Health Department. In general lots, are clean and well kept and the city presents a generally, neatly kept picture.

FLIES & MOSQUITOES

The matter of flies can be spoken of very briefly. They are found in Monroe as everywhere and are just as troublesome. Yet, they are kept at a minimum by protecting manure piles, so on, etc (vide Infra) and the only place neglected in this regard are the two main dumping grounds.

The matter of mosquitoes is somewhat more intricate.

Monroe lies in a natural mosquito belt. Swamp land lies all about it, yet filling in has mowed the boundary of swamp land quite a distance off.

Another problem has appeared- that is breeding places along the river banks. The river being an old one, geologically, flows very placidly along. Its current manifests itself only in the center while in the little bays ,along the banks, the water stagnates and forms an ideal place for mosquito breeding. This is being combated as vigorously as possible by the city engineer but his river force is, he complains, painfully inadequate.

It may be ventured here that if the city ever becomes financially stabilized the mosquito situation along the river might be eradicated at one bold stroke, by the erection of a U-dam ,with the hump of the U, pointing up stream, thus obtaining a rapidly moving current along either bank. An expensive proposition, it can of course be undertaken only after some of the more urgent needs of the city have been met.

The remaining place in which mosquitoes breed in large numbers is in the catch basins of the sewage system. Here the insects flourish and require constant, rigid attention at all times. Oil is introduced at three day intervals and is doubtless of infinite value in checking their development.

RATS

These pests do not constitute one of Monroe's worries. No information was obtainable to indicate that they were numerous or disturbing.

STABLES & MANURE

As in most places, the number of stables is rapidly diminishing as the number of garages increases. The horses are however, becoming very few. The old regulations still remain in force. Manure must be kept in a covered receptacle which must not become more than three quarters full. The regulations are generally well followed out.

SMOKE

The only sources of smoke in the city are the various mills. These all possess extraordinarily tall smoke stacks so that the smoke is, for the most part carried beyond the city limits. This possible nuisance thus solves itself.

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INDUSTRY.

Monroe's chief industry. is paper manufacturing. All sorts of paper are made there- wrapping paper, box board,etc. An inspection of the largest of the factories or rather of two of its plants will furnish a rather adequate picture of the industry in two very different aspects.

The Consolidated Paper Company consists of 5 large plants. Part of its buildings, and equipment is very new, modern and excellent; part of it, is the exact reverse.

The oldest unit of the company- old plant #1 is a low, rambling brick structure, one story high. It is comprised of various divisions wherein waste paper is transformed thru various stages to box-board . The plant thru-out is ill lighted and in the cold weather certainly must be abominably ventilated. The men working over the machines never are given day light, there being only a few small windows along the side walls. A single electric light of the size ordinarily used in house lightening , is hung over each machine. One or two antiquated fans are the only attempts at ventilation.

Most of the machinery is unguarded. A rail here and there are the sole evidences of any attempt at protection of life and limb of the workmen.

The room used for sorting the waste paper is naturally rather dusty and no dust~~laying~~^{laying} devices are in evidence .

The acme of inhuman labor practices is en-

countered in the drying room. Here, large sheets of the box-board are laid on slides which are shelved over pipes containing live steam. The entire apparatus is old and in poor repair. Steam is constantly escaping and the room is continually at a temperature around the 100 degree mark and of a humidity which is stifling. There is no means of cooling the passage-way or relieving the men who labor here, from the effects of the hot, moist atmosphere. Work here continuously would of course, be a physical impossibility. Fortunately, the men are actually in the room only about half the time. Yet the in-humanity of the place, the evident man-killing nature of this miniature inferno is such as to cause pity to well up in any one's heart for the poor unfortunates, who sweat blood and flesh away here in an attempt to obtain their daily bread.

Transferring attention to the latest and most modern of the company's plants, the contrast is as striking as it is encouraging. The long building with walls almost wholly built of glass, furnish the machine operators brilliant day light for the operation of the modern, well guarded automatic devices. The ceilings are so high, the air space so spacious that no worry on the score of aeration occurs to one.



Fig.19-
Note large windows.

As remarked above, the devices are guarded adequately. Wheels are enclosed in wire fencing (Fig.20) or board boxes. Belts are likewise surrounded. Rollers



Fig.20-
Machinery wheels guarded by
wire fencing.

are made to rotate so that the operator would be ejected rather than be seized by the rollers. Bars in front of sliding shelves make it impossible for operators to reach too far and so be injured. Thus all thru the factory, details have been observed. There might possibly be some need for a dust laying device in the sorting room. Unfortunately, from the stand point of the survey, there is no drying room. It is unnecessary in the manufacture of the paper, here produced. It should have furnished an interesting contrast to that described above, you may be assured.

The question of industrial poisoning is not important in the paper industry. Some few dyg stuffs are employed, sheifly Bismark Brown. No serious trouble is occassioned by it however.

The question of the general health of the 1500 employees un-answered is an unanswered problem. The labor is 90% unskilled and so chiefly transient. There has been no attempt to check up the amount of time lost thru illness. Accidents are not frequent. There is no factory doctor. A few first aid kits are distributed about. These serve the needs of the employees-from the employer's stand point.

The chief criticism must of course center about the old plant. Rebuilding would ,from the theoretical stand point, be ideal, yet, since this is not at all feasible from an economic view, there is left the alternative of giving the employees a place where they may enjoy decent working conditions.

The lighting system should be improved, by cutting sky lights. Safety devices should be installed. Large,adequate air fans connected with out doors,are a crying need. The dust should be dealt with and most of all steps should be taken to relieve the drying room of some of its heat and escaped steam. It is to be hoped that soon the employees of the Consolidated will enjoy the advantages of such improvements.

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SCHOOLS

The schools of Monroe are a curious mixture of modern architecture and antiquated ruins. The high school may have cost far more to build than its actual worth, yet it is a modern and well equipped plant. The school the writer chose to inspect was , on the other hand, the antithesis of all that is excellent,modern and well ordered. The McComb school is a large brick pile, very suggestive of a decaying mediaeval castle. It is located on one side of a city block, the other side being occupied by another school, the surrounding grounds being utilized as play ground(Fig.21)

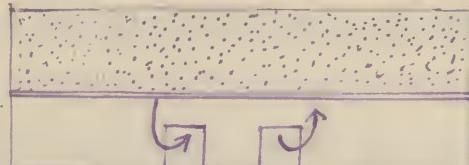


Fig.21-
Play ground with swings.

The wonder is that the safety board has not long ago condemned the wreck- yet the probability is that there is no such official body. At any event, into the brick shell the school board has attempted to install modern improvements.

The light cannot be criticised. It is well distributed thru large and numerous windows and the rooms obtain excellent ventilation in warm weather by the same means.

As colder weather ensues, the ventilation is carried on by a pump system. The entry and exit vents are situated side by side at the front of the room on central part of the lowest panel-



This mode, of course, does not permit of thorough ventilation. The fresh air enters the room and is immediately removed while vitiated air rises and keeps on increasing in volume.

The heating system is, they say, quite adequate so far as the quantity of heat is concerned. However, the system is the simple hot water affair with no provision made for providing a proper humidity. This is not, I suppose, to be expected in such a place however.

The toilets were scarcely in accord with modern view as regards school sanitation. The toilet seats were circular affairs, too high from the floor. A single case of vulvo-vaginitis might well disseminate the disease to every little girl in the school. Of course, at the time of the inspection the place was being utilized by children from the play grounds and the questionable conditions of cleanliness might not be existant in the school season.

The Medical supervision of the children, is administered by a school nurse. This lady, employed by the school board, goes from school to school, receiving those children who complain and if necessary, refers them to a physician.

The attempted supervision is carried no further than this in the public school.

There are as many parochial schools as there are public. These are far more up to date, in equipment and in appointments. It was impossible, at the time of making the survey to ascertain what special medical supervision was given the children in these schools.

So far as it was possible to ascertain, no special rule for exclusion of children, at times of illness, is existant. The attendants at the school are, of course, made to cease attending classes when attacked by measles, chicken pox, mumps, scarlet or typhoid fever diphtheria, small pox or any other infectious disease.

There is quite evidently a need of a good school physician. Worthy or capable men, in such a position, could not only supervise any disease which might make its appearance but would also insist on better ventilating systems, safer toilets and more modern heating systems. These changes would not necessitate any huge expenditure of funds. For example, in the McComb school, merely leading the fresh air vent into the room, at the top, rather than beside the outlet at the bottom, would infinitely improve the ventilation. This is merely meant to afford an example of what slight changes, intelligently made, may effect.

MISCELLANEOUS

In general accord with the plan of inactivity of the Monroe Board of Health, any supervision of the minor sanitary conditions in the city are entirely neglected. All markets, stores, and fountains are allowed to do as seems best, in the eyes of the proprietor, and it is improbable that any steps toward regulation would be undertaken unless conditions became so terrible that they occasioned a report by some lay citizen.

Yet, it must be said to the general credit of the store keepers, grocerers, bakers and butchers of the city, that they maintain excellent standards of cleanliness. The barber shops are also praise-worthy in this respect. In no instance was there any sign of carelessness, filth or unsanitary methods. The fountains are all modern- the kitchens spotless- the barber shops immaculate. It must be said to the credit of her citizens that Monroe enjoys greater advantages along these lines than her larger neighbors.

The only organization in the city that works toward the benefit of the general health is the Red Cross. Their chief activity is the so called, Baby Clinic, which is held once a week. This clinic cares for infants and children up until school age. The applicants are seen by the nurse and if necessary by the physician in charge. The physicians in the city serve alternately in this clinic.

In addition the Red Cross Nurse makes trips about the city, calling on the children.

There are of course no local supervisions of food and drugs or any such related subjects. This is one of the crying needs of the city- as has so frequently been repeated. An adequate board of health who would be active and energetic, supervising health and hygiene in their numerous states would automatically care for these smaller matters which are so ill taken care of.

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RESUME & COMMENT

The reader of the foregoing chapters can scarcely have finished his perusal without heaving a sigh and remarking "What a horrible state of affairs in this day and age", nor would the reader be far wrong. It is astonishing to find a set of such consistently bad conditions in the midst of educated and intelligent people.

Ofcourse the blame for many of the deficiences must be laid at the door of economic difficulties. Poor management, coupled with a very late start in modernizing a city, have been responsible for causing a great deal of unrest among those guarding the city finances. The tax rates are appalling and yet, as is quite apparent, the city shows little material improvement, for it. Perhaps it is human nature every where to prefer good paving on which to drive automobiles. to a city protected from typhoid, diphtheria and scarlet fever! Surely it is the human nature of Monroe . The street paving and park beautification campaign are ^{of} primary importance. Perhaps the public are correct, but it would seem to the writer that life in a city without parks would be infinitely better than death in the prettiest of cemeteries.

But whatever the reasons, the facts remain and they are, for the most part, ^{of} very discouraging set of details.

#1- The Health Department is a body of shabby organization, composed chiefly of incompetents and for the most part, non-functional. It neither has a set of required activities nor does it create any for itself.

The city is in urgent need of a Health Board consisting of competent individuals under the leadership of a well trained medical man who can devote a fair amount of time to public health work. This organization should make it its business to frame rules for the sanitation of the city, inspect the various food dispensaries, wells and so on, etc., maintain laboratories and in general, serve a protective function over the entire population .

#2- The water conditions are at present hardly commendable. The absolute lack of any preliminaries other than chlorination before serving it to the consumer, is not ideal. The water department is, however, in the hands of competent and energetic officials and with the installation of the new rapid sand filtration plant, the department will be all that could be desired.

#3- The sewage system is antiquated, inadequate and unsatisfactory. The river thru-out its course, thru the city is polluted by untreated refuse from house and factory. It more-over empties too near the water intake for aesthetic purposes, if not for hygeinic.

The city requires a modern screening and dis-infecting plant.

#4-GARBAGE

Here again the conditions found were deplorable. The collecting wagons were reasonably adequate but the material was disposed of at two dumps located in the midst of the city. This gave rise to unsightly ground, obnoxious odors and furnished an alarmingly perfect breeding ground for flies.

The system is entirely wrong for a city, the size of Monroe. The refuse should be gathered in a well covered wagon and be transported to a reducing plant outside the city, there to be disposed of. This ^{is} economically feasible and from a health standpoint, very essential.

#5- VITAL STATISTICS.

The vital statistics are not computed in the city. Individual reports are filed but no attempt at combining them into a semblance of an understandable report is made. The figures are, of course, obtainable from the State Department of Health.

The birth rate shows a substantial margin over the death rate. The infant mortality rate discloses a most alarming state of affairs, there being about one death to every ten births among children up to two years of age.

The births and deaths are generally reported with accuracy and promptness. The morbidity figures are not turned in at all accurately.

The chief criticisms are, then ;

#1- lack of interest by the local authorities

in compiling statistics.

#2-failure to inspect the figures intelligently and act on the hints given by them.

There should doubtless be embodied among the duties of the Board of Health the work of compiling statistics and attempting by health regulation, to improve them.

#6-INFECTIOUS DISEASES.

Infectious diseases are found to be reported with very little promptness or accuracy. The state requires reports of all infectious diseases, tuberculosis and venereal infections, being reported on special forms. The physicians regard the rule with respect, only for short periods following shake-ups by state officials. It is doubtful whether scarlet fever, measles, chicken pox, pertussis or a host of other so called lesser diseases are ever recorded accurately.

There is no set quarantine ruling ,it being left to the attending physician to quarantine for the usual disease duration.period.

The chief criticism is undeniably toward that type of provincial , old school physician whose foresight is so limited as to make him a danger rather than a safeguard to the community. Not until physicians appreciate that whatever their duty to their individual patient,their duty to society at large is still greater; that the convenience of an individual can never be served to the detriment of the general well being of the community - -

not until then, will such slip shod methods of health control, vicious attacks on the health of all, cease to exist. Education of the doctor seems the logical solution.

#7-MILK .

The milk conditions are probably as a whole the worst of the hygeinic problems encountered here. The dairies are, as a whole, ill kept. The dairymen are careless. There is a very small amount(600 quarts) of milk pasteurized . No medical milk commission exists. Perhaps by reporting on the two very best of Monroe's dairies, I have mislead. It must be here emphasized that the conditions on nearly all the other farms and dairies were terrible.

There is too little heed paid the State laws. There is no laboratory in Monroe for milk analysis. The dairy-men are ignorant of the basic health points as regards milk. These points,open to severest criticism,might with a bit of effort be rectified.

The local authorities should organize a medical milk commission under whom could work a full time milk inspector. The state laws should thereby be enforced rigidly. There should,of course,be an adequate laboratory where analyses and bacterial accounts might be carried out . Perhaps most important of all-there should be a thorough going ,educational campaign to instill in the mind of the dairy-man that wholesome regard for cleanliness, so important in such work, and also to point out clearly to him the undeniable advantages of pasteurization, proper cooling and allied subjects.

#8-SANITARY NUISANCES.

The summary need include very few words regarding sanitary nuisances. With the exception of the rubbish heaps and garbage dumps, the city is orderly, clean and quiet. Measures are being taken against insects to the limit of the economic ability of the community. More cannot be said.

The only recommendation is that already suggested under 'GARBAGE'.

#9- INDUSTRY.

The industry of the city is chiefly confined to the paper mills. Conditions in these places range from what may be termed, very good indeed, down to conditions which are absolutely abominable. In general, the workmen's life is regarded very lightly by the employer.

It would be an excellent plan to employ factory physicians who could not only give medical attention when necessary, but who might make suggestions as regards improving working conditions -- these suggestions to be carried into practice.

#10-SCHOOLS.

The schools likewise range from good to bad. In some there has been excellent engineering- in others, there has been practically none.

Certain schools are poorly ventilated and possess extremely dangerous and improper sanitary fixtures. Since those schools, falling in this class are of almost pre-historic vintage , it would seem that razing and re-building would, in the end, be the better and more logical

plan of procedure.

#11-

In general there is very little more to be said.

Ofcourse the Health Department does not supervise any of the minor sanitary details of the city.

The Red Cross holds its baby clinics once a week and its nurse makes house visits.

The city stores, restaurants, etc., conduct themselves very admirably.

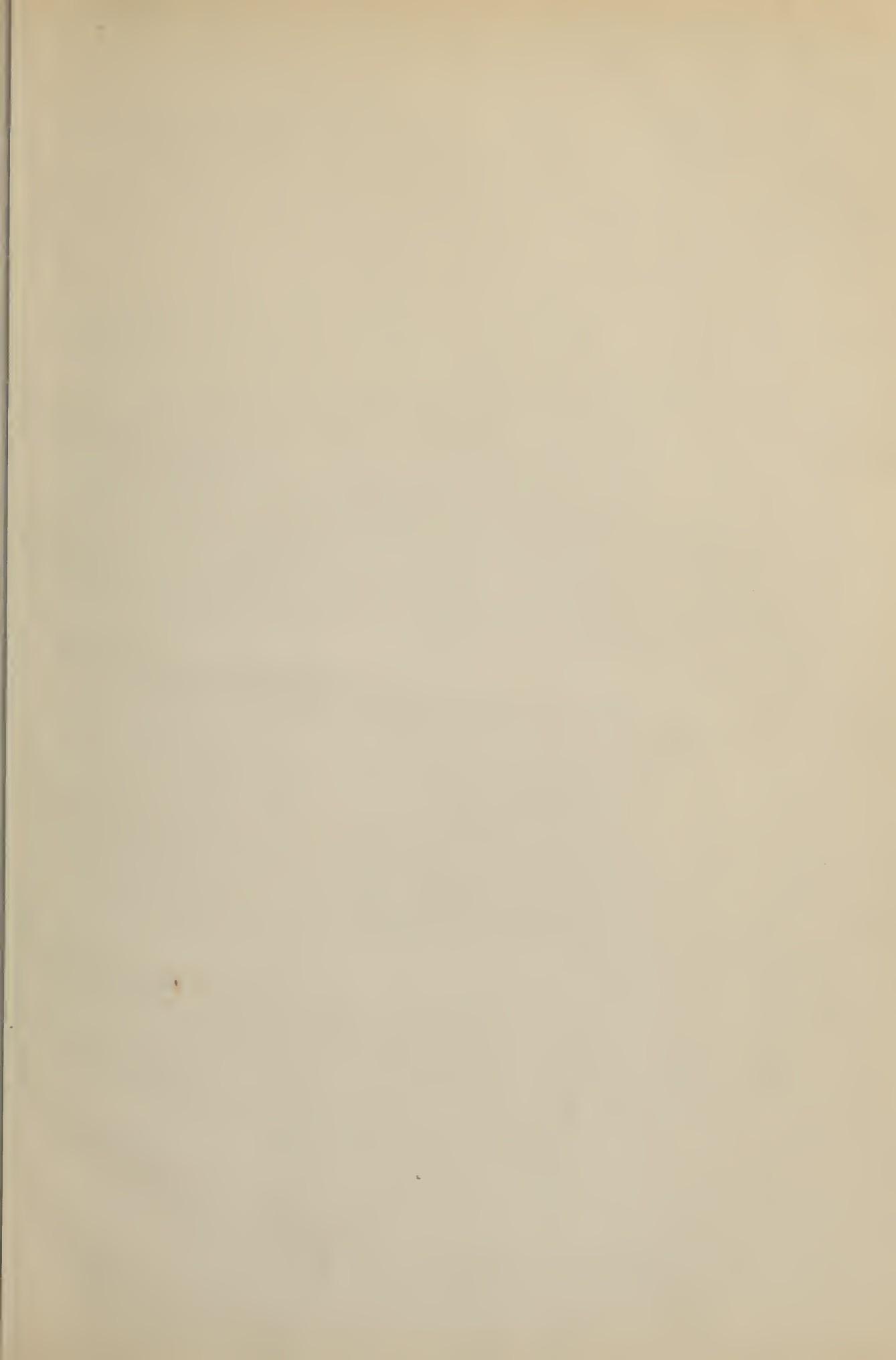
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The city of Monroe is a pretty spot. Its clean appearance would serve to mislead the unsuspecting. It is unfortunate that so much carelessness and inefficiency has made it less safe than beautiful. Certainly the writer feels, after conducting the survey, that despite the apparent good health and low morbidity and mortality rates. enjoyed by the city, Monroe is still a safer city to pass thru than in which to stop. One may enjoy its beauty and historic sites without the hazard of taking up residence in the city.

Gradually the light is dawning. The sun rises late but surely the light of knowledge is shedding its rays over Monroe. A new filtration plant, a milk inspector-- advances surely. Though the progress be slow, still it is truly progress- so let us wish, the little city good luck and the kindness of fate, until science makes fate's intervention unnecessary.

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